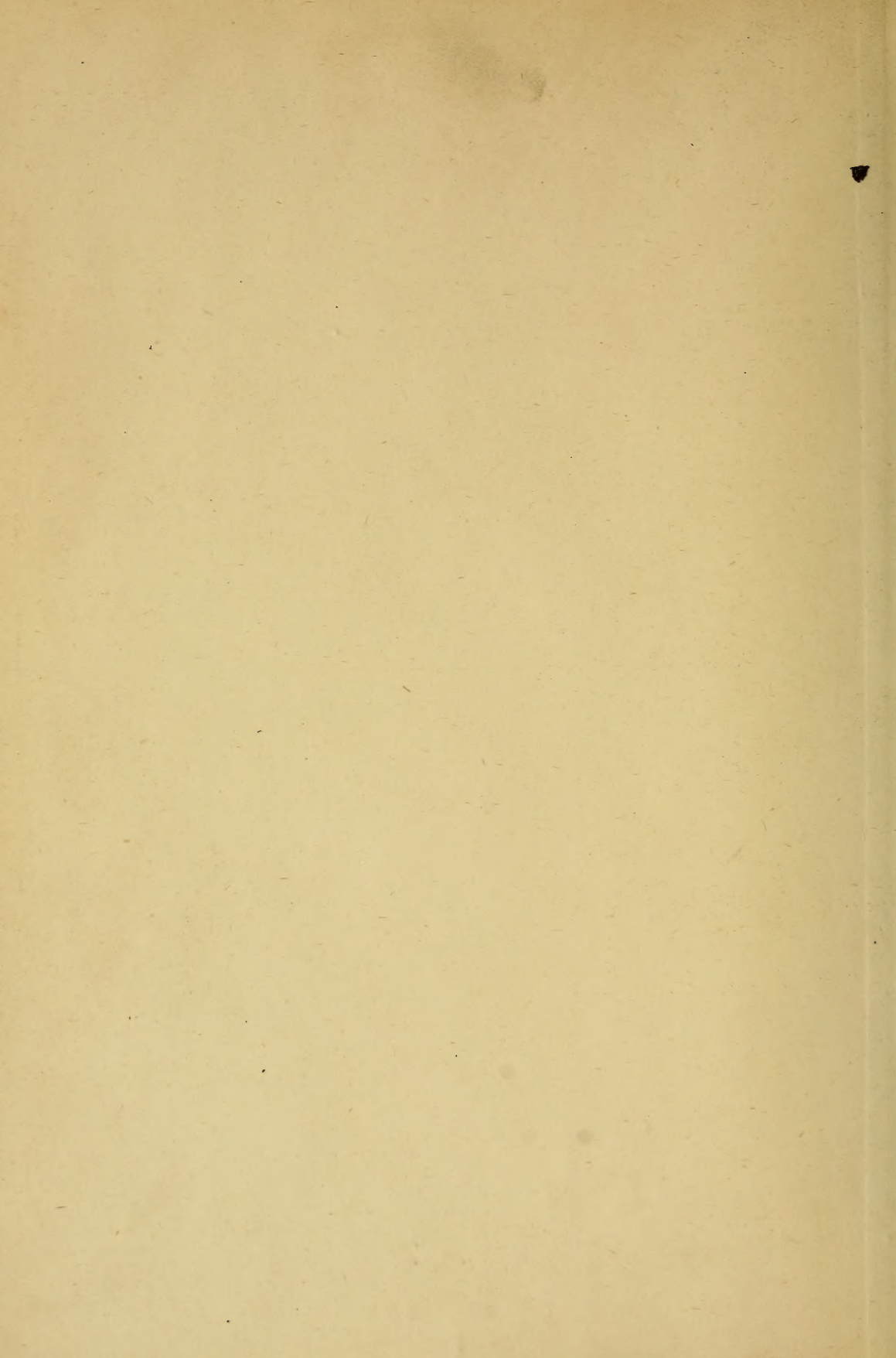


QE
295
A4Z
NH



CONTENTS AND INDEX

OF THE

FIRST TWENTY VOLUMES

OF

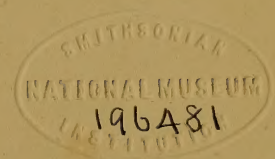
THE MEMOIRS OF THE GEOLOGICAL
SURVEY OF INDIA,

1859 TO 1883.

BY

W. THEOBALD,

LATE OF THE GEOLOGICAL SURVEY OF INDIA.



CALCUTTA:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1892.

THE NATIONAL MUSEUM

Smithsonian Institution

Department of Anthropology

Division of Ethnology

Office of the Director

Washington, D. C.

January 1, 1900



RECEIVED

OFFICE OF THE DIRECTOR

1900

INDEX

TO

THE FIRST TWENTY VOLUMES

OF

THE MEMOIRS OF THE GEOLOGICAL SURVEY OF INDIA.

(1)—AUTHORS.

AUTHOR AND TITLE OF MEMOIR.	Volume.	Page.
BALL, V.—The Ramgurn Coal-field	vi	109
" The Chopé Coal-field	viii	347
" Geology of the Rajmehal Hills	xiii	155
" On the Aurunga and Hutár coal-fields, and the Iron-ores of Palamow and Toree	xv	1
" Geology of the districts of Mámbhúm and Singhbhúm	xviii	61
BLANFORD, H. F.—On the Geological Structure of the Nilghiri Hills (Madras)	i	211
" On the Cretaceous and other rocks of the South Arcot and Trichinopoly districts, Madras	iv	1
BLANFORD, W. T.—Note on the Laterite of Orissa	i	280
" On the Geological structure and Relations of the Raniganj coal-field, Bengal	iii	1
" On the Geology of the neighbourhood of Lynyan and Runneekote, north-west of Kotree, in Sind	vi	1
" On the Geology of a portion of Cutch	vi	17
" On the Traps and Inter-trappean beds of Western and Central India	vi	137
" On the Geology of the Taptee and Lower Nerbudda valleys	vi	163
" The Geology of Nagpur and its neighbourhood	ix	295
" The Geology of Western Sind	xvii	1
" On the Hills in the neighbourhood of the Sind and Punjab frontier between Quetta and Dera Ghazi Khan	xx	105

AUTHOR AND TITLE OF MEMOIR.	Volume.	Page.
BLANFORD, W. T., and CHILD, H.—On the Geological Structure and Physical Features of the province of Orissa	i	249
BLANFORD, W. T. and H. F., and THEOBALD, W.—On the Geological Structure and Relations of the Talcheer Coal-field, in the district of Cuttack	i	33
DALTON, Capt., and HANNAY, Lieut.-Col.—Note on recent examination of the gold-yielding deposits of Upper Assam, with analyses of gold	i	90
FOOTE, R. B.—On the Geology of parts of the Madras and North Arcot districts lying north of the Palar River	x	1
„ On the Geological Features of the South Mahratta country and adjacent districts	xii	1
„ On the Geological structure of the Eastern Coast from latitude 15° northward to Masulipatam	xvi	1
„ On the Geology of the Madura and Tinnevely districts	xx	1
FEDDEN, F.—Distribution of the fossils described by Messrs. d'Archiac and Haime in the tertiary and infra-tertiary groups of Sind	xvii	157
GRIESBACH, C. L.—Geology of the Ramkola and Tātapāni coal-fields	xv	129
„ Geology of the section between the Bolan Pass in Balūchistān and Girishk in South Afghanistan	xviii	1
HUGHES, T. W. H.—On the Jherria Coal-field	v	227
„ On the Bokaro Coal-field	vi	39
„ The Kurhurbāri Coal-field	vii	209
„ The Deoghur Coal-fields	vii	247
„ The Karanpūrā Coal-fields	vii	285
„ The Ītkhūrī Coal-field	viii	321
„ The Daltonganj Coal-field	viii	325
„ The Wardha Valley Coal-field	xiii	1
KING, W.—On the Cuddapah and Kurnool formations in the Madras Presidency	viii	1
„ The Gneiss and Transition rocks and other formations of the Nellore portion of the Carnatic	xvi	109
„ The Upper Gondwānas and other formations of the coastal region of the Godāvāri district	xvi	195
„ The Geology of the Prānhita-Godāvāri valley	xviii	151
KING, W., and FOOTE, R. B.—On the Geological Structure of parts of the districts of Salem, Trichinopoly, Tanjore, and South Arcot, Madras	iv	223
MALLET, F. R.—On the Gypsum of Lower Spiti, with a list of minerals collected in the Himalayas	v	153
„ On the Vindhyan series in the North-Western and Central Provinces of India	vii	1
„ On the Geological Structure of the country near Aden	vii	257
„ On the Geology of the Dārjiling district and the Western Duārs	xi	1

AUTHOR AND TITLE OF MEMOIR.	Volume.	Page.
MALLET, F. R.—On the Coal-fields of the Nágá Hills bordering the Lakhimpur and Sibságar districts, Assam	xii	269
MEDLICOTT, H. B.—On the Vindhyan rocks and their associates in Bundelcund	ii	i
" On the Geological Structure and Relations of the southern portions of the Himalayan ranges between the rivers Ganges and Ravee	iii, pt. 2	i
" The Coal of Assam, with geological notes on Assam and the hills to the south of it.	iv	387
" Geological sketch of the Shillong plateau in north-east Bengal	vii	151
" On the Sâtpúrá Coal-basin	x	133
MEDLICOTT, J. G.—On the Geological Structure of the central portion of the Nerbudda district	ii	97
MEDLICOTT, J. G., and WILLSON, W. L.—On the Geological Structure and Physical Features of the district of Midnapore.	i	249
OLDHAM, R. D.—Report of the Geology of parts of Manfpur and the Nágá Hills	xix	217
OLDHAM, T.—Preliminary notice on the Coal and Iron of Talcheer, in the tributary Mehals of Cuttack	i	i
" Note on specimens of Gold and Gold-dust from Shué-gween	i	94
" On the Geological Structure of a portion of the Khasi Hills, Bengal	i	99
" On the Geological Structure and Physical Features of the district of Bancoorah	i	249
" On some Fossil Fish-teeth of the genus <i>Ceratodus</i> from Maledi, south of Nágpur.	i	295
" On the Geological Relations and probable geological age of the several systems of rocks in Central India and Bengal	ii	299
" Additional remarks on the Geological Relations and probable geological age of the rocks in Central India and Bengal	iii	197
" Indian Mineral Statistics, I.—Coal	iii	215
" Indian Mineral Statistics, I.—Coal	vii	131
" The Cachar Earthquake of 10th January, 1869 (edited by R. D. Oldham)	xix	1
" The Thermal Springs of India	xix	99
STOLICZKA, F.—Geological Sections across the Himalayan Mountains from Wangtu Bridge on the Sutlej to Sungdo on the Indus, with an account of the formations in Spiti	v	i
" Summary of Geological Observations during, a visit to the provinces—Rupshu, Karnag, South Ladak, Zanskar, Suroo, and Dras of Western Tibet	v	337
" Osteological Notes on <i>Oxyglossus pusillus</i> (<i>Rana pusilla</i> , Owen) from the tertiary frog-beds of Bombay Island	vi	387

AUTHOR AND TITLE OF MEMOIR.	Volume.	Page.
THEOBALD, W.—On the Tertiary and Alluvial Deposits of the Central portion of the Nerbudda valley	ii	279
„ On the Geology of Pegu	x	189
WAAGEN, W.—On the Occurrence of <i>Ammonites</i> associated with <i>Ceratites</i> and <i>Goniatites</i> in the carboniferous deposits of the Salt-range	ix	351
WAAGEN, W., and WYNNE, A. B.—The Geology of Mount Sirban, in the Upper Punjab	ix	331
WYNNE, A. B.—On the Geology of the Island of Bombay	v	173
„ On the Occurrence of Frog-beds in Bombay Island	vi	385
„ On the Geology of Kutch	ix	1
„ The Trans-Indus salt-region in the Kohát district; (with an appendix on the Kohát mines or quarries, by H. Warth)	xi	105
„ On the Geology of the Salt-Range in the Punjab	xiv	1
„ On the Trans-Indus extension of the Punjab Salt-Range	xvii	211

INDEX

TO

THE FIRST TWENTY VOLUMES

OF

THE MEMOIRS OF THE GEOLOGICAL SURVEY OF INDIA.

(2)—GENERAL INDEX.

SUBJECT.	Volume,	Page.
Abrassa, Eastern	ix	282.
„ plains of, detailed geology of	ix	268.
Abu fossils, described by Buckland	x	195.
Actinolite schists	xii	54.
Adam's bridge, origin of	xx	73.
Aden, geology of country near	vii	257.
„ section of crater of	vii	260.
„ water-supply of and quality of	vii	265.
Adusa, abnormal argillaceous beds near	ix	306.
Æolian accumulations	xvi	100.
„ formations in South India	xx	87.
Aerial denudation	xviii	11.
„ formation which threatens Kandahar	xviii	10.
Afghanistan, previous writers on geology of	xviii	1.
„ Southern, geology of	xviii	1.
„ South, minerals found in	xviii	55.
Agate mines of Ruttunpoor	vi	359.
Agates and ornamental stones	vi	381.
Ahmed Shah, tomb of, made of Hippuritic crystalline lime- stone	xviii	43.
Aiholi (Iwullee), Jain temples of	xii	106.
Akranee and Khandeish, traps of	vi	345.
Alápali, coal reported near	xviii	186.
Albite granite, order of crystallization of minerals in	v	13.
Alicoor hills and area	x	72.
Allagiri group	xx	16.
' Allah Bund,' reputed elevation of	ix	33.
Alleerajpoor and Chota Oodipoor area	vi	192.
Alligator, very tall story of an	xix	171.
Alluvia on the Konkan	xii	243.
Alluvial deposits of the Kristna delta	xvi	92.
„ „ „ Punniar, Vellaur and Cauvery	iv	20.
„ formations in Madura and Tinnevely	xx	75.
Alluvium of Manipur valley	xix	236.

SUBJECT.	Volume.	Page.
Alluvium in Ranigunj field	iii	140.
" newer, and surface soils	vi	234.
" passage of, into laterite	i	69.
Alum of Kutch	ix	88.
Alumpoor on Khoondair limestone	viii	49.
<i>Alveolina</i> and <i>Nummulites</i> not confined to any particular zone	xx	119.
Alveolina-limestone of Kotree, fossils from	vi	3.
Amber of Upper Burma	xix	226.
Amethysts and Cairngorms from Vellum	iv	167.
Aminbodū, elegant Jain temples at	xvi	105.
Ammonites associated with Ceratites and Goniatites in the carboniferous deposits of the Salt range	ix	351.
<i>Ammonites inflatus</i> Sow., near Mai-i	x	311.
" <i>madraspatanus</i> , H. F. Blanford	iv	221.
" <i>mantelli</i> , attribution usually erroneous	iv	221.
" <i>tamulicus</i> = <i>Am. guadalupæ</i> , Roem.	iv	221.
Amphicælian crocodile from Sind	xvii	35.
Amygdaloidal felstone	viii	193.
Andagu-kyouk, note on	x	293.
Angoching hills, Upper Tertiaries of	xix	225.
Anhydrite	xi	150.
Annelide-tracks at Purongo	i	52.
<i>Anthracotherium</i> , a Manchur fossil	xvii	65.
Apatite in Cuttack	i	37.
Apoor hill, quartz of uncertain origin in	x	128.
Apothegm touching coal-fields, for 'practical men'	x	135.
Arakan Range, Triassic rocks in	x	224.
" Yomā (range)	x	218.
<i>Archegosaurus</i> from near Bijori	x	159.
" in Damuda series	vii	297.
Arcot and Trichinopoly, geology of, previous observers of the Arcot, South, and Trichinopoly districts, geology of	iv	346.
Argillaceous tertiary group in Kutch	ix	1 to 9.
<i>Arges murchisoni</i> and <i>edwardsi</i> , Khirtar species	xvii	78.
Arriallor and Trichinopoly beds, relations of	iv	149.
" fossils, possible mixture of Trichinopoly species	iv	146.
" group, conclusions respecting	iv	161.
" " described	iv	125.
" " detailed geology of	iv	131.
" " fauna of	iv	127.
Artesian boring at Aden, unpromising	vii	265.
Artificial fuel from Sikkim coal	xi	60.
Ash and pumiceous breccias in Narbudda	vi	346.
" beds (volcanic breccia) in the Jam ghat	vi	294.
" conglomerate	vi	330.
Assam, alluvium of, remarks on the	iv	127.
" auriferous deposits of, by Capt. Dalton and Col. Hannay	i	90.
" mineral resources of	iv	412.
" mining leases in, considerations on	iv	408.
" petroleum in	iv	415.
" sub-Himalayan rocks in	iv	435.
" the coal of, with geological notes	iv	387.
Atgurrh-basin defined	i	44.
Attock slates	ix	333.

SUBJECT.	Volume.	Page.
Aurunga and Hutar coal-fields	xv	1.
Aurunga coal-field	xv	109.
" " table of formations in	xv	30.
<i>Avicula contorta</i> beds, 'kössen strata' equivalent in Spiti	v	67.
Axelused to cut laterite at Cottayam	iv	372.
Axial group (Triassic)	x	315.
Axials in Manipur	xix	223.
Babington, iron ores from Sumbalporé	i	6.
Bacillary structure in quartzites	iii (2)	35.
Bagh beds and Lameta beds	vi	216.
" " Mahadevas	vi	214.
" " junction with trap	vi	212.
" " name ill-chosen	vi	207.
" " section at Chirakhan	vi	210.
Bagh, country round	vi	294.
Baghnee R. to Chota Oodipoor, section from	vi	307.
Bágrá group, a very variable one	x	150.
Bahadur Khel, contorted sections near	xi	248.
" " salt aspect of	xi	245.
" " quarries described	xi	312.
" " to Nundrukki, geology of	xi	242.
Baitool area	vi	190.
" " and Upper Taptee valley, geology of	vi	269.
Bakh ravine, section in	xiv	253.
Bakrála Ridge	xiv	119.
"Ball" coal	iii	66.
Baltimorite, or fibrous serpentine	iv	315.
Baluchistan, section of rocks in	xvii	41.
Banaganpully, diamond mines of	viii	96.
" " group (Kurnools)	viii	40, 87.
Bancoorah, Midnapore and Orissa, geology of	i	249.
Bandar coal-field	xiii	145.
Bándá Serai to Jatta, geology of	xi	226.
Barákars (Chopé coal-field)	viii	350.
Barákar group defined	iii	212.
" " in Hutar coal-field	xv	95.
" " " Palamow	xv	40, 59, 95.
" " " Pranhita-Godaveri area	xviii	242.
" " " Rajmahal hills	xiii	179.
" " " Sirguja	xv	144.
" " " Tawa and Pench valleys	xiii	18, 94.
" " " Wardha valley	x	162.
Basalt, columnar in Kutch	ix	240.
"Basaltic sandstone," origin of the term	x	201.
Beas, area of the	iii (2)	57.
Beas, conglomerates near the, strange fact about the	iii (2)	149, 150.
Beaumont, Elie de, theory of faults, of	ii	257.
Beddadanol coal-field	xviii	191, 195.
Belaspur fault	iii (2)	147.
Beryl, mines in Coimbatore	i	229.
'Betta,' Canarese for 'hill'	xii	184.
Bezváda gneiss	xvi	205, 206.
Bhabeh series	v	17.
Bhagalwada and Ramapur Trap	xii	60.
Bhagathoro hill, lower Nari fossils from	xvii	125.

SUBJECT.	Volume.	Page.
Bhattani hills	xvii	299.
Bheemgoda fault, throw of many thousand feet	iii	(4) 123.
Bhima limestone, chipped implements of	xii	265.
" series, basal-bed of a conglomerate	xii	152.
" " (Karnul)	xii	139.
" " = lower Vindhya	xii	164.
Bhit and Badhra ranges	xvii	108.
Bhooj, geology of neighbourhood of	ix	158.
Bhoojia hill	ix	168.
Bhopal to Sutwas, geology from	vi	239.
Bijawur bottom-rock	ii	41.
" breccia, upper and lower, character of	ii	43.
" formation	ii	6, 35.
" iron rock	ii	44.
" series	vi	197.
" " , trap contemporaneous with	vii	23.
Bijawurs and metamorphics, relation between	vi	201.
" at Bagh	vi	303.
" in the Western Nurbudda	vi	199.
" upper	ii	42.
Bijigurh shales	vii	27.
" " , black color of, deceptive as to promise of coal	vii	121.
Bijori horizon (Damuda)	x	159.
Bilgi, Stambha, a remarkable specimen of carving	xii	261.
Bisahir, description of	v	10.
Bitumen, oozing from hippuritic limestone	xviii	59.
Black soil of Vellaur	iv	252.
" Regur	vi	235.
Blaini group	iii (2)	30.
Blown sands	iv	249, 253.
"	xvii	108.
" trees and shrubs which fix	x	12.
Bokaro coal-field, Barakar group in	vi	48.
" Damuda series in	vi	47.
" described	vi	39.
" ironstone shale group in	vi	97.
" Panchet series in	vi	103.
" Raniganj group in	vi	100.
" Talchir series in	vi	43.
Bolan pass and Girishk, geology of section between	xviii	I.
Bollapully outcrops of coal	xviii	184.
Bombay, amygdaloidal trap of Parel	v	213.
" black basaltic rock of Antop hill	v	209.
" blown sand at Mahim, graveyard in	v	225.
" Colaba traps	v	215.
" columnar basalt in Back Bay (Carter)	v	215.
" early writers on the geology of	v	173.
" elevation of land at	v	204.
" fresh-water beds at Wurlee	v	221.
" " of	v	193.
" " in	v	206.
" geology of the island of	v	177.
" ghâts, denudation of	v	201.
" 'red breccia' of Sion hill	v	208.
" rocks of the island of	v	188.

GENERAL INDEX.

v

SUBJECT.	Volume.	Page.
Bombay shales at Lovegrove	v	220.
" structure of ground related to geology of	v	197.
" trap rocks, analyses of	v	189, 190.
Bone beds	xi	238, 252, 270, 285.
Bones in <i>Venus granosa</i> beds	ix	249.
Boorhanpur to Chicklee, section from	vi	286.
Boulder bed	iv	45, 46.
" beds (Palæozoic) Trans-Indus	xvii	274, 286.
" groups, Trans-Indus	xvii	239.
<i>Brachiops laticeps</i> , Owen, from Mángli	ix	298.
Brahuik area of Baluchistan	xviii	4.
Breaking weight of Bundair sandstones, curious results	vii	119.
Breccia probably representing the Kymore conglomerate	vii	60.
Breccias common in the Kaládgi series	xii	163.
Brick and porcelain clays in Orissa	i	279.
Bricks, quality of some, supplied in Pegu	x	341.
Brine-spring at Kalra	xi	176.
" " in Manipur	xix	223, 242.
Buchao to Lettera hill, section from	ix	135.
Budavada fossils, list of	xvi	71.
Budsnr fault passes into an anticlinal axis	iii (2)	144.
Bugti hills, Vicary's observations on	xx	124, 125.
Building stones of Cutch, list of localities of	ix	93.
" " " Sind	xvii	194.
" " " Wardha Valley	xiii	114.
" " " (Vindhyan)	vii	116.
Bundair group	vii	80, 87.
" section of terraces in	vii	93.
" limestone, peculiar form of	vii	92.
" plateau	vii	16.
" sandstone as a building material	vii	118, 119, 120.
" sandstones, shales and limestones	vii	27.
" shales	ii	59.
Bundairs, lower	vii	80.
" upper	vii	94.
Bundelcund, coal in, note on	ii	91.
" denudation and drainage in	ii	87, 88.
" greissose rocks of	vii	22.
" igneous rocks of	ii	75.
" previous writers on	ii	93.
Burdwan paving stone	xviii	65.
" " a gritty quartzite	i	257.
Burrail range described	iv	432.
Burwai to Mandoo, section from	vi	290.
Buxa series	xi	12, 33.
Byrenconda quartzites (Cuddapah)	viii	41, 125, 212, 218.
Cachar hills, earthquake of 1869, among the	xix	37.
" earthquake of 1869	xix	1.
" " " centre of disturbance	xix	2.
Calcutta, earthquake of 1869, slightly felt at	xix	33.
Calderite	xvi	24.
" analysis of	xviii	64.
Cambrian aspect of some rocks in Midnapur	i	260.

SUBJECT.	Volume.	Page.
<i>Candona</i>	xviii	277.
Carboniferous group, Trans-Indus	xvii	239.
" limestone in the Salt range	xiv	93.
<i>Cardita beaumonti</i> beds and contemporary Dekkan trap	xvii	36.
" lowest eocene	xx	108.
" upper cretaceous	xvii	34.
" with <i>ammonites</i> from the Salt range	xvii	36.
Carnatic, Nellore portion of	xvi	109.
Cauvery, Delta and alluvium of	iv	247.
" Vellaur and Puniar, not forming deltas now	iv	19.
Cave temples in Wardha Valley	xiii	115.
" with <i>Phyllorhina larvata</i> near Kyeantallee	x	310.
Celestine (sulphate of strontia) in Sind	xvii	196.
Central India and Bengal, geological relations and probable age of rock systems	ii	299.
<i>Ceratites carbonarius</i> , Waagen, described	ix	355.
<i>Ceratodus</i>	xiii	86.
" and <i>Hyperodapedon</i> beds of Maledi of Panchet-age	xviii	272.
" 'coprolites' of	ix	327.
" <i>hunterianus, virapa</i> and <i>oblongus</i> , described	i	308.
" teeth from Maledi	i	303.
<i>Chaetetes yak</i> from the Maniring pass	iii	202.
Chalcedony in travertine	v	21.
Chambal mountain	iv	322.
Champaneer, geology of neighbourhood of	xiv	131.
" group	vi	338.
Chanda district, Barakar group in	vi	202.
Chandgurb and Sutwas to Burwai and Simrol ghat	xiii	21.
Charcoal and coals, heating powers of	vi	249.
Chatik ridge, indurated pipe-clay of	i	26.
Cheroperee, section near	xix	219.
Cherrapoonjee, earthquake of 1869 scarcely felt at	ix	253.
Cherrapoonjee, remarks on section at	xix	19.
Cherra, rocks of, divided into three groups	iv	417.
Chert flakes and cores at Sawyerpuram	iv	420.
Chey-air beds (Cuddapahs)	xx	94.
Chey-air group of Cuddapahs	viii	41, 126, 168.
Chicháli range and pass	xvi	144.
Chikiala group (Lower Gondwana)	xvii	254, 256.
" sandstone, iron-ores in	xviii	267, 290.
Chikkim limestone and shales	xviii	197.
Chilka and Pulicat lakes, fauna of	v	116, 118.
Chilka lake, described	iv	193.
" freer communication formerly with sea	i	251.
Chinakuri, neighbourhood and coal-seams of	i	275.
Chintalpudi sandstones	iii	113.
Chintapilli peninsula, section across	xvi	205.
Chipped implements in the Wardha valley	viii	297, 301.
" of limestone	xviii	299.
Chirakunt, fossils from	xii	247.
<i>Chirolepis mülleri</i>	xviii	280.
Chitrana hills	xviii	280, 289.
Chopé coal-field	ix	277.
	viii	347.

SUBJECT.	Volume.	Page.
Chor mountain, a remarkable feature	iii, (2)	40.
Chota Oodipoor to plains of Baroda, section from	vi	323.
" Tawa river, geology east of	vi	245.
" " to the Jherkhul, geology of	vi	265.
Chouk talon ' near Bassein, a ' plug ' of trachyte	x	331.
Chromate of iron	iv	315.
Chromic iron at Hanle	v	167.
" mineral, new, and analysis of	v	167.
Chrysoberyl in Cuttack	i	37.
Chrysotile used for rosaries	xviii	52.
Churwar and Katrol range, detailed geology of	ix	175.
Cleavandite	xvi	24.
Climate of Naga Hills formerly more severe	xix	231.
Coal at Antargaon	xviii	179.
" Bhagánwála	xiv	138.
" Bundalla	xviii	184.
" Dandot, Salt Range	xiv	166.
" Kaingára	xviii	180.
" Mach	xx	175.
" Pid, Salt Range	xiv	162.
" below Malot, Salt range	xiv	177.
" boring for, in the Godaveri valley	xviii	301.
" fields of Aurunga and Hutar	xv	1.
" " Bengal, limitations of deposition of	vii	334, 335,
" field of Deoghur	vii	247.
" " Karanpura	vii	285.
" " Naga Hills	xii	269.
" " Bokara	vi	39.
" " Chope	viii	347.
" " Daltonganj	viii	325.
" " Itkhuri	viii	321.
" " Jaipur (Assam)	iv	397.
" " Jherria	v	227.
" " Kurhurbari	vii	209.
" " Ramghur	vi	109.
" " Ramkola and Tatapani	xv	129.
" " Ranigunj	iii	1.
" " Talcheer	i	33.
" " Terap (Assam)	iv	397.
" " Wardha Valley	xiii	1.
" from Gopalprasad	i	8.
" " Palamow, assays of	xv	111.
" " Thajet-mio	x	297, 342.
" in the Rajmahal hills	xiii	194, 226.
" in Sikkim	xi	51.
" mineral statistics	iii (1)	Art. II.
" near Puspali	xviii	184.
" " Sandrápali	xviii	183.
" of Assam	iv	387.
" Bolan and Harnai route	xx	229.
" Cherra, supra-nummulitic, description of	i	140.
" the Luni Pathan country	xx	229.
" Maobelarka, of cretaceous age	vii	160.
" return of, raised from 1858 to 1868.	vii	146.
" seams in Ranigunj field and divisions, by Mr. Williams	iii	18, 21.

SUBJECT.	Volume.	Page.
Coal, steady increase in consumption in Bengal	vii	134.
„ various analyses of Indian	i	198.
„ workable seam at Lairungao	vii	163.
„ and iron of Talcheer	i	1.
Cobalt and Nickel ores in Afghanistan	xviii	46.
'Codali' of Khasi hills, price of	i	205.
Collieries, return of, worked in 1867 and 1868	vii	140.
Colossal vertebral bones	ii	203.
Columnar trap near Pullasee	vi	261.
Concretionary limestone, strange mode of weathering of	xii	121.
Conglomerate in gneiss	xviii	207.
„ metamorphosed, and unaltered in Champaneer beds	vi	340.
Conjeveram gravels	x	41.
Copper, correspondence on mines in Sikkim	xi	93.
„ in Nellore district	viii	270.
„ „ Sikkim	xi	69.
„ „ Trichinopoly	iv	216.
„ old workings in Cuddapah	viii	268.
„ ore in Manipur	xix	241.
„ ores in Singhbhum	xviii	143.
„ shales in the Salt range	xiv	91.
Coral-reef limestone, considerations on origin of	iv	70.
Coral-reef, raised at Rameswaram island	xx	70.
<i>Carcharodon</i> teeth	x	278.
Carnelian mines, description of, by Mr. J. Copeland	vi	178.
<i>Corbula lyrata</i> shales, exposure of, in Kurreer island	ix	104.
Courtallam, lake west of, perhaps of glacial origin	xii	119.
Crater, extinct, near old Kandahar	xviii	52.
„ possibly such, near Padwani, and ashbeds	vi	331.
Cretaceous and other rocks of the South Arcot and Trichinopoly districts, Madras	iv	1.
„ beds and traps, unconformity of	vi	325.
„ „ in the Deva, described	vi	348.
„ „ „ Shillong plateau	vii	153.
„ „ near Quetta	xx	140.
„ fossils of Khasia area	vii	181.
„ group, Trans-Indus	xvii	241.
„ rocks in Spiti	v	116.
„ „ the Salt range	xiv	103.
„ „ Sind	xvii	33.
„ series in Afghanistan	xviii	34.
„ „ Khasia region, bottom rock of	vii	171.
Crystalline limestone at Pulliam	iv	272.
„ rocks in Hazára	ix	334.
„ „ Lower Bundelcund	ii	49.
„ „ Sirguja	xv	131.
Cuddalore group, general remarks on	iv	176.
„ (Rajahnundri) sandstones	xvi	84.
„ sandstones, chert in	iv	258.
„ „ described	iv	165.
„ „ and laterite	iv	260.
„ „ in Nellore	xvi	175.
„ „ in the Godaveri district	xvi	248.
„ „ possible correlation of	iv	179.

SUBJECT.	Volume.	Page.
Cuddalore series	x	59.
Cuddapah and Kurnool formations, Memoir on	viii	1.
Cuddapah formation (see Kadapah), age of	xvi	145.
" " in Nellore	xvi	144.
Cullygoody ridge, limestone of, described	iv	61.
Cumbum slates (Cuddapahs)	viii	41, 227.
" " lead worked in	viii	235.
Cutch, see Kach	ix	1.
Cuttack, Talcheer Coal-field, in district of	i	33.
<i>Cyrtoma</i> , beds containing	i	119.
Daling series	xi	12, 39.
Daltonganj coal-field	xv	108.
" " described	viii	325.
" " economic summary of	viii	343.
Damercherla (Madaváram) coal-field	xviii	192.
Damuda beds assigned to Upper Palæozoic age	ii	333.
" " flora of	ii	326.
" " coal basins, areas of each	vii	285.
" " seams south of the	iii	117.
" " group described	iii	29, 39.
" " in Cuttack described	i	56.
" " in Orissa, remarks on age of	i	81.
" " Kámthi and Panchet beds in Nágpur	ix	325.
" " series, metamorphism in the	xi	15, 25.
" " name proposed	ii	310.
" " system, flora of and age	iii	206.
Damudas, age of, gradually determined	iii	199.
" " in (Daltonganj coal-field), Barákars	vii	332.
" " (Deogurh fields)	vii	251, 253, 255.
" " (Itkhuri coal-field)	viii	323.
" " Jherria basin	v	244.
" " (Kurhurbari field)	vii	221.
" " Sikkim	xi	14.
" " upper, description of	ii	176.
" " upper, reptilian remains in	ii	312.
Dandot plateau, Salt range	xiv	164.
<i>Dapedius</i>	xviii	276.
D'Archiac and Haime, distributional table of fossils	xvii	198.
Darjiling and the Western Duars, geology of	xi	2.
" " boundaries of and orographical features	xi	4.
" " damage slight, done at, by earthquake of 1869	xix	31.
Deccan and Malwa trap	vi	219.
" " traps, geological age of	vi	156.
" " traps, not submarine	vi	145.
" " traps	x	178.
" " and laterite in Palamow	xv	49.
" " in Pránhita-Godaveri area	xviii	167, 296.
" " in Sind	xvii	36.
" " in South Mahratta country	xii	171.
" " minerals included in the	xii	189.
" " slope of, 16 feet per mile	xii	173.
" " thickness of and duration of period of the	vi	147.
Denudation in Narbudda valley enormous	ii	264.
" " peculiar form of chemical	iv	425.
" " sub-aerial, conclusive example of	vii	109.

SUBJECT.	Volume.	Page.
Denwá group	x	153.
Deogurh coal-fields	vii	247.
Depression, probably recent in Naga hills	xix	232.
Dera, fossils from near	xx	206.
Dhaoladhar, section of, at Dhurumsala	iii (2)	62.
" glacial debris of	iii (2)	155.
Dhenodur, detailed geology of country west of	ix	209.
Diamond beds of Punnah	vii	68.
" of Cuddapah and Kurnool	viii	96.
" crystal of	viii	101.
" diggings in Cuddapah, doubt as to success of	viii	88.
" in the Mahanuddi	i	88.
" localities, list of	viii	106.
" mines at Punna	ii	67.
" at Chennoor and Banaganpilly	viii	4.
" description of, by Dr. Heyne	viii	97.
" of Banaganpilly, Capt. Newbold on	viii	6.
" " Nellore district	xvi	113.
" " Southern India	viii	5.
" " Punna described by Adam	vii	9.
" " Punna described by Franklin	vii	7.
" " Punna described by Jacquemont	vii	9.
" workings in the Godaveri district	xvi	253.
Diamonds in Rewah shales	ii	66.
Dibrooghur, damage done at, by earthquake of 1869	xix	27.
<i>Dicercocardium himalayense</i> , a Para-limestone fossil	v	62.
<i>Dicynodont</i> or 'Karoo' beds	iii	199.
Dihing group	xii	298.
Dinajpur, damage slight, done at, by earthquake of 1869	xix	32.
Disai coal-field	xii	344.
Disang group	xii	286.
Disturbance, palæozoic and mesozoic periods of	xviii	171.
Doab traps	xii	58.
Dokawana marble	ix	91.
Dolomite	xii	55, 258.
" in Sikkim	xi	34, 36.
Drainage basins in India, enormous antiquity of	xvi	121.
Dras, geology of	v	337.
Dubrajpur group	xiii	198.
Dudkur infra-trappeans	xvi	205.
Dumoh flags, dendritic markings on	vii	95.
Dun deposits of Samaguting, Naga hills	xix	228.
Earthquake of 1869, Cachar, depth of focus of 30 miles or so	xix	68.
" " estimated velocity of wave-particle 30 feet	xix	79.
" " per second	xix	79.
" " origin of, near the Jaintia hills	xix	65.
" " results of	xix	183.
Earthquakes, catalogue of Indian	xix	163.
" instructions for observing	xix	89.
Eastern Coast (Madras), geological structure of	xvi	1.
Eastern Ghats, described	iv	16.
Economic aspect of the Trans-Indus salt region	xi	299.
" geology, building stones, Himalayas	iii (2)	175.
" " coal, water	iii (2)	180, 181.
" " gypsum and salt	iii (2)	177.

GENERAL INDEX.

xi

SUBJECT.	Volume.	Page.
Economic geology, iron, copper, lead, gold, Himalayas	iii (2)	178, 179.
" " of South Mahratta country	xii	256.
" " , slates, lime and cement, Himalayas	iii (2)	176.
" " west of the Kistna	xvi	103.
" resources of Kohat district	xi	293, 299.
Elephant teeth, fossil, from north of Dibrugarh	iv	436.
Elevation of the coast in Cuttack	i	89.
Elevatory ellipsoids and domes	viii	129.
Eocene and tertiary beds conformable, Kohat	xi	169.
" formation 5,000 to 9,000 feet in Southern Afghanistan	xx	145.
" group in Afghanistan	xviii	21.
" " , Trans-Indus	xvii	242.
" rocks resemble the 'Flysch' of the Alps	xx	152.
" sub-division in Southern Sind	xx	149.
Epidotic granite of Bancoorah	i	258.
" limestone	xvi	24.
Eruptive rocks in Afghanistan and Hungary, similarity of	xviii	49.
<i>Eryon</i> , comp. <i>barrovensis</i> , from Vemávaram	xvi	63.
<i>Estheria</i>	xviii	277.
" from Mángli, not specifically identified	ix	329.
" <i>mangaliensis</i> , Jones	xiii	69.
" <i>minuta</i> from Mangali, error concerning	iv	Errata.
" <i>minuta</i> , Goldfuss, a Panchet fossil	iii	129, 197.
" monograph of fossil species of	xviii	178.
Extra-peninsular area of India, relation of, to peninsular area	xvii	2.
Fabricated reports of coal by the Kazi of Jupla	xv	8.
Fault, Koserece, described	iii (2)	142.
" with reversed 'throw'	xvii	78.
" rock in Damudah sandstones in Narbudda	ii	248.
" " pseudomorphic quartz	vi	128.
Faults in Ranigunj field	iii	149.
" in Talchir basin	i	68.
Felspar, pale green crystals of, in dykes	xviii	208.
Fibrous quartz and fibrous calcite	x	307.
Fire-clay of Wardha valley	xiii	114.
Fish teeth, fossil, from Maledi (<i>Maleri</i>)	i	295.
Fleming, Dr., fossils collected by	xiv	21.
Flexible sandstone of 'Talchir age'	xiii	16.
Flint cores from fissures in limestone	xvii	106.
" Trichinopoly	iv	213.
" with sponges	xvii	103.
Flora, living, of the Cuddalore area	iv	267.
Fluor spar in gneiss at Wangtu	v	166.
Fluviatile deposits, South Mahratta	xii	233.
" mollusca from lower Siwalik beds	xx	233.
Foot-print in Vindhyan sandstone	ii	306.
Foraminifera, cretaceous genera of, in Spiti	v	117.
Fossil leaves and palms in Cachar	iv	434.
" resin, cretaceous with marine fossils	vii	177.
" wood group	x	247.
" " in Godaveri gravels	xviii	298.
Fossils, distribution of, in Sind	xvii	197.
Fresh-water limestone associated with trap	ii	78.
Frog beds at Chaopattee, Bombay Island	vi	385.
<i>Fusulina</i> band	xiv	195, 222.

SUBJECT.	Volume.	Page.
Gabbro in Manipur	xix	225.
Gáj group	xvii	53, 109, 124.
" , fossils of the	xvii	56.
" , section of	xvii	92.
Galena in Kulu	v	165.
<i>Gangamopteris cyclopteroides</i> , Fst.	xiii	178.
Ganges and Ravee, geology of area between	iii (2)	1.
" canal, Colonel Cautley on	iii (2)	184.
" delta in an area of subsidence	x	216, 239.
Ganoid fishes from Kota	xviii	176.
Garnets, fine in the copper beds of Nellore	xvi	134.
Gawilgurh range between the Poorna and Taptee	vi	275.
Gems and ornamental stones in Trichinopoly	iv	217.
Geological papers, Nerbudda and Taptee valleys	vi	383.
Ghatprabha falls near Gokak	xii	87.
<i>Ghooftin</i> and <i>Kunkar</i> , restriction of terms—in Orissa	i	267.
Gieumal sandstone	v	113.
Giri fault, end of	iii (2)	43.
Glacial phenomena near the Salt-Range	xiv	116.
Glaciated boulder discovered by Mr. Fedden	xiii	16.
" " from the Olive group of the Salt-Range	xiv	104.
" rocks of pre-carboniferous age, Trans-Indus	xvii	233.
Glauconite sandstones, cretaceous, at Mamluh	vii	178.
<i>Glossopteris</i> as an argument of age	ii	328.
" <i>browniana</i> , Brogn. of Nagpur, a Damuda species	ix	328.
Gneiss, central, N. W. Himalaya	v	12.
" foliation and bedding coincide in Bengal	vi	193.
" " of, coincident with 'cleavage' in Bijawur	vi	195.
" fragments enclosed in limestone	iv	274.
" in South India, but feebly foliated	xvi	125.
" " Trichinopoly	iv	269.
" jointing in (Trichinopoly)	iv	306.
" of Bengal	xi	44.
" " Darjiling	xi	44.
" " Nellore	xvi	126, 128.
" quarries at Aruppukotai	xx	20.
" series in Pránhita-Godaveri area	xviii	201.
" " west of the Kistna	xvi	7.
" simulating a sedimentary deposit	i	41.
" with pistacite veins	xii	45, 257.
Gneiss and Transition rocks, Nellore portion of the Carnatic	xvi	109.
Godaveri alluvium	xviii	297.
" district, coastal region, Upper Gondwanas	xvi	196.
" " , economic geology of	xvi	252.
" " , local groups in the	xvi	205.
" gorge of	xvi	200.
" gravels, note on	vi	232.
Godumullay group of magnetite beds	iv	280.
Gold from Assam, assay of	i	93.
" in affluents of the Malprabha	xii	259.
" " Kandahar, geological position of 'reefs'	xviii	55.
" " Ningthi valley	xix	241.
" " Pegu	x	343.
" " Southern India	xviii	199.
" note on, from Shuégween	i	94.

SUBJECT.	Volume.	Page.
Gold quartz 'reef' at Kandahar	xviii	43.
" quartz reported from Thayetpeinyua	x	203.
" , yield of, per ton of gravel in Assam	i	91.
Golden oolite, Trans-Indus	xvii	241.
" " Cutch	ix	211.
Gollapilis and Kámthis, unconformity of	xvi	217.
Gollapili and Vemávaram fossils	xvi	83.
Gollapili sandstones	xvi	205, 212.
Gondwana series in Palamow	xv	38.
" " Sirguja	xv	140.
Gondwanas of the Godaveri district (coastal region)	xvi	195.
" lower, in the Pranhita-Godaveri area	xviii	236, 266.
" " " Rajmahal hills	xiii	175.
" upper, Godaveri district	xvi	211.
" " Rajmahal hills	xiii	198.
Goniatites, ceratites, and ammonites, association of	ix	351, 357.
" <i>primas</i> , Waagen described	ix	356.
Goolcheroo quartzites (Cuddapahs)	viii	41, 126, 148.
Gooraman-konda, diamond beds	viii	103.
Gopalprasad, carbonaceous shale and coal of	i	59.
Granite a good building stone	xii	256.
" and quartz veins in Trichinopoly	iv	335.
" " schist, transition between	ii	129.
" " syenite veins, S. Mahratta	xii	64.
" dyke intersecting trap	vi	333.
" enveloping fragments of gneiss	iv	341.
" in Sikkim	xi	43.
" of Kyiktyo and Kyougye (big rock)	x	328.
" vein between cleavage planes	vi	316.
Granitic rocks in Nellore	xvi	164.
" " Sirguja	xv	135.
Granitoid areas, east coast, Madras	xvi	31.
" rock, with twinned crystals of a second felspar	i	255.
Graphic granite	iv	338.
Graphite in gneiss	xvi	25.
" " Sikkim	xi	64.
Greenstone of Khasi hills	i	156.
" dykes do not affect cretaceous rocks	iv	37.
Gumber fault described	iii (2)	134.
Gundahari sulphur locality	xx	212.
Gundycotta gorge, features of	viii	227.
Gungapur beds (Kota group)	xviii	269, 279.
Gunoorgurh shales	vii	27, 81, 82.
Guzerat, alluvium of	vi	233.
Gwalior and Kaládgi rocks, resemblance between	xii	138.
" " Cuddapah rocks contrasted	viii	290.
" ash beds, associated with Cuddapahs	viii	184.
" rocks	ii	62.
Gwaliors, Cuddapahs, and Kaladgis	xvi	145.
Gypsum and dolomite group, Trans-Indus	xvii	239.
" cretaceous of Trichinopoly	iv	214.
" in Ootatur group not contemporaneous	iv	74.
" " the Bugti hills and Quetta	xx	231.
" of Kach	ix	90.
" " Kohat	xi	149.

SUBJECT.	Volume.	Page.
Gypsum of Lower Spiti	v	153
„ upper, and Dolomite group, Trans-Indus	xvii	239.
Hæmatite and gneiss, interfoliation of, at Jackatalla	i	219.
Hæmatitic schists, S. Mahratta	xii	50.
'Hala range,' a mythical feature	xvii	25.
<i>Halobia lommeli</i> , Wissm. in Pegu	x	224, 323.
Harand to Mangrotha, geology of road from	xx	215.
Hazaribagh, earthquake of 1869 slightly felt at	xix	33.
Helmund area, formations in the	xviii	9.
Hills of Sind and Punjab frontier	xx	105.
Himalaya, Eastern and Western, contrasted	iii (2)	7.
„ lower or outer	„	5.
„ nummulitic rocks in the higher	„	165.
Himalayan area, western limit of lower	„	59.
„ „ geology, abstract up to 1860	„	9.
„ „ lower, fossils of, in Tal valley	„	69.
„ „ series, characters of	„	17, 21.
„ Ranges, between Ganges and Ravee, geology of	„	1.
Himalayas, slow upheaval of and successive coast lines	„	97.
„ Strachey's views on the structure of the	„	160.
Hislop, correlation of Mahadeva beds with Nagpur shales	ii	108.
Hippuritic limestone altered by granitic intrusion	xviii	8.
„ „ Griesbach's classification of beds above	xx	120.
„ „ in Persia and Sind	xx	143.
„ „ Rezbanya and the Banat, Hungary	xviii	46.
„ „ Sind	xvii	33, 133.
Hoháru, coal-field discovered by Dr. W. Dunbar, Jour. As. Soc.	„	1841, 300.
Hoharoo coal-field, title of—altered	vii	286.
Hooker, Dr. J. D., discovers Damuda beds near Pankabari	xi	2.
Hornblendic schists, S. Mahratta	xii	47.
Hoshungabad, geology of	vii	97.
Hot springs, depositing tufa	xvii	111.
„ of Bangah	xviii	174.
„ „ Gondala	xviii	173.
„ „ Harár	xvii	88.
„ „ Jarum	xv	19.
„ „ Kándhi	xvii	114.
„ „ Karo Kot	xvii	100.
„ „ Laki	xvii	126.
„ „ Mugger Pir	xvii	182.
„ „ Mutrani	xvii	86.
„ „ Namba pung	iv	414.
„ „ Onabdyo	vi	288.
„ „ Pegu	x	352.
„ „ Pir Bingi	xvii	113.
„ „ Rath Nath	xvii	171.
„ „ Salári	xvii	86.
„ „ Salbaldee	vi	280.
„ „ Shah Ruhi	xvii	113.
„ „ Siah Tank	xx	209.
„ „ Sikkim	xi	8.
„ „ Sir Obba	xi	175.
„ „ Tatapani	xv	21.
„ „ Thatha	xv	20.

XV

SUBJECT.	Volume.	Page.
Hot springs of the Bakh ravine	xiv	24, 48.
" " Damuda valley	xviii	72.
" " Kaha stream	xx	217.
" used for irrigation	xx	208.
Human bones in alluvium	xvi	96.
Hung-dung spur, limestone of the	xix	220.
" river gravels on the	xix	236.
Hurda and Nimawur area	vi	191.
Hutar coal-field	xv	91, 110.
<i>Hyopotamus</i> , a Manchar fossil	xvii	130.
<i>Hyperodapedon</i>	xiii	86.
Ice action suggested to account for Talchir boulders	{ xviii i	272, 275. 55, 56.
Idupalapadu, fossils from	xvi	75.
Igneous rocks in Afghanistan	xviii	47.
" " Central India and Bengal	ii	47, 75, 129, 199.
" " Himalayan region	iii (2)	70.
" " Manbhūm	xviii	100.
" " Singhbhum	xviii	136.
Ilmenite, supposed existence of, in Manipur	xix	240.
Implement bearing gravels	xii	241.
" gravels in Nellore	xvi	179.
Implements, chipped, of limestone	xii	247.
" in lateritic rocks	xvi	86.
Index to Vol. I, Part I	i	98.
Indian mineral statistics, coal, 1861- " " " " 1869	iii (1) vii	Art. II. 131.
Indus valley, sandstones and slates of	v	129.
Infra Krol beds	iii (2)	29.
Infra trappean beds	xii	165.
" or Lameta group in Nagpur	ix	
" beds, Baïtoöl	vi	301, 315, 330.
" S. Mahratta	x	271.
" of Bombay and Central India con- tracted	vi	150.
" section of, at Belkera	vi	282.
" fauna	xvi	233.
" fossils	ii	210.
" common to the Nagpur and Rajamundry beds	xvi	247.
" grits of Kutch	ix	56.
" series	ii	199.
Intrusive rocks of Pegu	x	330.
" east coast, Madras	xvi	42.
Ippatam conglomerates of doubtful age	xvi	80.
Irrang river on Manipur-Cachar road, rocks in the	xix	218.
Irrawadi delta is an area of elevation	x	216, 239.
" flood, discharge of	x	214.
" supposed petrifying power of water of the	x	197.
Irlaconda quartzites (Cuddapahs)	viii	126.
Iron clay, angular fragments of vein-quartz in	xii	219.
" of Belgaum	xii	213.
" caves in	xii	211.
" of Bidarbhabhi hill	xii	220.
" or 'summit bed' of Deccan trap	xii	180, 200.

[illegible]

SUBJECT.	Volume.	Page.
Jherriagurh coal-field, note on, by T. Oldham	v	333.
Johnson, Mr., coal works at Sonadi	ii	111.
Jooria, Wurrar, and Vichia hills, detailed geology of	ix	200.
Juggiapett and Bellamkonda, geology between	viii	293.
" " " " beds near	viii	296.
Junmulmudgoo group, denudation of	viii	84.
" " " " Kurnools	viii	40, 67.
" " " " limestones, Mr. Foote's notes on	viii	79.
Jurassics in the Salt Range	xiv	101.
" " " " invaded by trap in Kutch	ix	55.
" " " " of Cutch, of Upper Jurassic age	ix	95.
" " " " section of, near Bowlee (Cutch)	ix	181.
Jurassic series, Cutch	ix	49.
" " " " Trans-Indus	xvii	241.
" " " " (upper), fauna in Spiti	v	114.
Kach (Cutch), alluvium of	ix	81.
" " " " and Sind tertiaries contrasted	xvii	65.
" " " " argillaceous group in	ix	78.
" " " " Captain Grant's fossils from	ii	322.
" " " " earthquakes in	ix	29.
" " " " economic resources of	ix	86.
" " " " fossils	vi	34.
" " " " geological summary of	ix	83.
" " " " geology of	ix	1.
" " " " a portion of	vi	17.
" " " " marine beds of lower oolitic age	vi	29.
" " " " meteorology of	ix	5.
" " " " physiography of	ix	12, 22.
" " " " previous writers on	ix	6.
" " " " publications on geology of, list of	ix	291.
" " " " relation of tertiaries in, to traps	ix	72.
" " " " remarks on age of <i>Zamia</i> beds	vi	37.
" " " " results of geological examination of	vi	26.
" " " " rock formations of	ix	48.
" " " " Tertiary beds and Nummulitics of	vi	29.
" " " " traps of	vi	30.
" " " " thickness of	ix	60.
" " " " within a great volcanic belt	ix	62.
Kadapahs (Cuddapahs) and gneiss, association of	xviii	211.
Kadapah (Cuddapah) and Kurnool districts, economic re- sources	viii	265.
" " " " " " earlier writers on	viii	3.
" " " " " " formations, sections of	viii	297.
" " " " " " geology of	viii	1.
" " " " " " irrigation works in, neglected	viii	283.
" " " " " " physiography of	viii	14.
" " " " " " rocks, faults, &c., in	viii	259.
" " " " " " series	viii	36.
" " " " " " boundary faulted or not, uncertain	viii	123.
" " " " " " formation	viii	124.
" " " " " " formation, Pákál quartzites	xviii	209.
" " " " " " rocks, east coast	xvi	45.
" " " " " " section past	viii	25.
" " " " " " series, sub-divisions of	viii	40, 126.

SUBJECT.	Volume.	Page.
Kadapah slates vitiated by "jointing"	viii	40.
" sub-division, in Pákal area	xviii	217.
" thickness of, in Pranhita-Godaveri area	xviii	227.
" trappoids of	viii	184.
" traps, contemporaneous	viii	191, 195.
" " intrusive	viii	198, 200.
Káhun plateau	xiv	170.
Kalabagh, neighbourhood of	xvii	246.
Kaládgi basin, basal breccia beds of	xii	108.
" " fault rock in	xii	114.
" breccia, a 'beautiful rock'	xii	132.
" group, quartzites in the Konkan	xii	94.
" sections, various	xii	78.
" series, intrusive rocks in	xii	136.
" " lower	xii	73.
" " upper	xii	129.
Kaládgis, age of	xvi	145.
Kálawala pass, fossils from	iii (2)	15.
Kalroyenmullays described	iv	236.
Kolymullays and Pachamullays	iv	18.
Káma shale	x	273.
Kamah hill, cave in, tenanted by bats	x	313.
Kamawaram coal-field	xviii	184.
Kámthi group	xiii	66, 71, 94.
" " fauna and flora of	xiii	69.
" " in Nagpur	ix	301, 305.
" sandstone and fossils	xvi	208.
Kámthis in the Pranhita-Godaveri area	xviii	250.
Kandahar and Helmund area	xviii	8.
Kane, R., gorge of	ii	89.
Kangra valley, glacial deposits in the	iii (2)	20.
Kángu or soapstone	x	336, 352.
'Kanna maram,' perhaps the 'mangrove'	xx	83.
Kanupati, bulls and 'lingums' at	xvi	107.
Kanta, detailed geology of the	ix	285.
Kápra beds	xviii	231.
Karáchi Collectorate, south-western part of, described	xvii	155.
" to Sonmiáni, section from	xvii	189.
Karangli hill, galena and trap of	xiv	147.
Karáni, section near, commented on	xx	181.
Káranpura coal-fields	vii	285.
" " " Damudas in	vii	293, 296, 323.
" " " economic summary of	vii	339.
" " " Panchets in	vii	293, 318, 330.
" " " Talchirs in	vii	293, 294, 323.
'Karez,' an underground canal	xviii	12.
Kargil to Kashmir, section from	v	348.
Karnag, geology of	v	337.
Karnul (Kurnool) and Upper Vindhya	viii	287, 291.
" formation, concluding remarks on	viii	121.
" series, sub-divisions of	viii	39, 42, 52, 73.
'Karuppa-man,' 'Regada' or 'Regur'	iv	352.
Kasauli beds, typical, at Dugshai	iii (2)	12.
" " flora of	iii (2)	85.
Kasom hills, chloritic beds and limestones of	xix	219.

SUBJECT.	Volume.	Page.
Katak (<i>see</i> Cuttack), coal and iron of	i	1.
Kateru intertrappeans	xvi	241.
Katharigarh and Behwora traps	xii	60.
Kelat, Dr. Cook's section of rocks near	xvii	43.
Kerowli, fault near, with over 4,000 feet 'throw'	vii	99.
Kerhurrur stream, sub-recent deposits of the	xix	230.
Khasi hills, economic geology of	i	180.
" elevation of localities in (Appendix)	i	209.
" enormous rainfall of	i	174.
" excessive floods in the	i	176.
" geological structure of a portion of, Memoir on	i	99.
" granite	vii	203.
" " younger than greenstone	vii	206.
" greenstone	vii	201.
" igneous rocks of	i	151.
" intrusive greenstone	i	112, 122.
" MacClelland's views of age of, reviewed	i	161.
" metamorphic rocks of	i	110.
" nummulitic fossils of	vii	167.
" physical geography of	i	171.
" sedimentary deposits in	i	117.
" supra-nummulitic deposits in	vii	159.
" survey, collection of fossils of, lost at sea	i	179.
" table of elevations in	i	209.
Khasor range, unconformity in	xvii	234.
Khirthar fossils from Bhagothore hill	xvii	127.
" group, fossils of the	xvii	48.
" group, laterite at base of	xvii	46.
" range	xvii	25, 74, 89.
Khoond-air group (Kurnools)	viii	39, 42.
Khoond district, Cutch	ix	248.
Khyrasol beds, Ranigunj	iii	138.
Kistna beds (Cuddapah)	viii	41, 126, 250.
" group of Cuddapahs	xvi	144.
" orography, south-west of the	xvi	3.
" previous writers on the geology of the neighbourhood	xvi	6.
" river, course of, described	viii	27.
" river to Uddaloor, section from	viii	297, 309.
" table of formations south-west of the	xvi	4.
Kohat, climatology of	xi	121.
" district, geology of	xi	105.
" mines or quarries, appendix	xi	195.
" previous writers on geology of	xi	109.
" physiography of	xi	115.
" salt, age of	xi	107.
Koilkootla limestones (Kurnools)	viii	39, 45.
Kokulam group, Madura and Tinnevely	xx	12.
Koler lake	xvi	203.
Kolymullays described	iv	239.
Kölinck, Prof. de, Salt Range fossils determined by	xiv	22.
Kopamedza, upper tertiaries of	xix	227.
Koranji island	x	277.
Kota, fauna and flora	xviii	276.
" fossils from	xiii	86.
" group, age of, according to Feistmantel	xviii	277.

SUBJECT.	Volume.	Page.
Kota, group (Lower Gondwana)	xviii	267, 278.
„ Maleri group, fauna and flora of	xiii	86.
„ sections at	xviii	284.
Kotree, geology north-west of	vi	1.
Krishna, falls of, described by Col. Meadows Taylor	xii	10.
Krol limestone	iii (2)	25.
Kuling series (carboniferous)	v	24, 126.
„ „ fauna of	v	27.
Kunkar, gneiss decomposing into	iv	344.
„ of Burdwan, analysis of	xviii	65.
„ pisolitic and botryoidal	iv	345.
Kunjamullay, magnetic iron ore beds at	iv	379.
Kurhbari coal-field described	vii	209.
„ coal-field, early observers of	vii	211.
„ „ economic summary of the	vii	240.
„ coal seams enumerated	vii	224 to 238
Kurirosum, contorted beds near	xi	196.
Kurnool (<i>see</i> Karnul), section through	viii	22.
Kurnools, shore beds in	viii	79.
Kurra Maldi traps	xii	59.
Kurro, section in, and building stones, Western India	vi	325.
Kurruk salt quarries described	xi	311.
Kurumbar rings	iv	369.
„ „ composed of granite and laterite	x	119.
Kutch (Cutch), geology of	ix	1.
Kuttra shales of Carter	vii	11.
Kymore conglomerate	ii	28.
„ group	vii	49.
„ shales	ii	59.
Labradorite, abnormal form of	xv	36.
Láchi, geology westward of	xi	182.
Lacustrine formations, S. Mahratta	xii	228.
Lahul to Korzog, section of rocks from	v	340.
Lainyan, fossils from	xvii	143.
Laisen, lignite at	xix	227.
Lakes and lake-deposits, N.-W. India	iii (2)	157.
„ in Southern India	xii	119.
Lakhimpur, loud reports heard at, during earthquake of 1869	xix	28.
Laki range	xvii	26.
„ „ and Hyderabad hills, Sind	xvii	122.
Lameta group	ii	196.
„ „ in Wardha valley	xiii	87, 96.
Lamination in limestone due to cleavage not bedding	vi	259.
Landslips in the South Mahratta country	xii	152.
Lapis Lazuli in Badakshan	xviii	60.
Laterite as a building material	iv	372.
„ associated with trap	ii	78.
„ capping, Dulputpore hill	ii	79.
„ contact with underlying rocks	i	272.
„ iron in, diminishes from surface	i	290.
„ metamorphosed and detrital in Nellore	xvi	176.
„ of Bancoorah	i	265.
„ „ ‘Cuddalore’ age probably	iv	168.
„ „ Cutch	ix	68.
„ „ Midnapur	i	269.

SUBJECT.	Volume.	Page.
Laterite of Orissa	i	273.
" " , its origin	i	69.
" " , note on	i	280.
" " Ranigunj field	iii	139.
" " the Konkan	xii	224.
" " the nummulitic group	vi	367, 369.
" " the Rajmahal hills	xiii	222.
" sedimentary, deceptive appearance of	vi	362.
" Stirling on	i	3.
" tubiform cavities in, origin of	iv	262.
" varieties of, and theories respecting	iv	266.
Lateritic deposits, Foote's discrimination of, not fully accepted	xvi	175.
" formations in Madura and Tinnevely	xx	45.
" gravels, chipped implements in	x	29, 40.
" near Vellum	iv	260.
Lead mines of Jungamrajpilly and Buswapoor	viii	272.
Leelite, Cuddapah rock corresponding to	viii	192.
Leh to Padam, section from	v	343.
Lepidotus	{ xiii	86.
	{ xviii	276.
Liassic beds in Spiti	v	66.
Lignite, in Sind	xvii	192.
" mistaken for coal	iv	395.
Lilang series	v	30, 125.
" (triassic) fauna in Spiti	v	37.
Lime in Manipur	xix	241.
" " Sikkim	xi	83.
Limestone breccia, (Nerjee leeds)	viii	76.
" in Pegu	x	343.
" near Coimbatore	i	246.
" of Wardha valley	xiii	112.
" outcrops, marked by teak forest	xviii	283.
" (Vindhyan) analysis and economic uses of	vii	113.
Lodae and Joorn Range, detailed geology of	ix	142.
Long Island, notes on	x	292.
Lower Narbudda valley, geology of	vi	163.
Lukput	ix	33, 35, 36, 39
		44.
Lynyan and Runikot, geology of	vi	1.
" coal (lignite) of and report on	vi	4, 13.
Macroglossus spelæus, a frugivorous cave-bat	x	313.
Madavaram coal-field	xviii	191.
Madhopur jungle, erroneous theory of Fergusson	vii	155.
Madras and North Arcot districts, geology of	x	1.
" cretaceous rocks in	x	61.
" Cuddapah and Kurnool series in	x	125.
" different alluvia in	x	15.
" economic geology of	x	131.
" granitic rocks of	x	130.
" lateritic formations of	x	27.
" metamorphic rocks in	x	126.
" previous writers on geography of	x	5.
" Rajmahal series in	x	63.
" river alluvia of	x	20.
" shells from marine alluvium of	x	19.

SUBJECT.	Volume.	Page.
Madras sub-aerial formations in	x	12.
" soils of	x	14.
" trappean rocks of	x	130.
Madura and Tinnevely, economic geology of	xx	98.
" " geology of	xx	1.
" " previous writers on	xx	9.
" " metamorphic groups in	xx	11.
" Jurassic rocks in	xx	33.
<i>Magilus antiquus</i> , silica casts of, from Sandoway	x	301.
Magnesian sandstone group of the Salt-range	xiv	87.
" limestone in gypsum	xi	280.
" sinter and botryoidal chalcedony	iv	322.
Magnetite, various localities of	iv	318.
" veins	iv	312.
" veins, Dr. Benza on	iv	242.
Magnetite and hæmatite in schists of Konijedu	xvi	18.
" and hæmatite in schists of Ongole	xvi	17.
" beds of Gundlakamma	xvi	19.
" beds, various	iv	291, 293, 296.
" in Southern India, localities, of	iv	279.
• Mahadewa, 'Damoodah,' 'Talcheer groups, whence named	i	84.
" faulted boundary at Patroda	ii	231.
" group, fossil exogenous wood in	ii	100.
" " description of	ii	183.
" " in Cuttack, described	i	64.
" " " Hutar coal-field	xv	105.
" " " Palamow	xv	45, 87, 105.
" " " Sirguja	xv	147.
" " name applied	ii	315.
" " not penetrated by Damuda trap	ii	192.
Maidan range	xvii	261.
Maii group (Cretaceous)	x	311.
Makran group	xvii	63.
Makum coal-field	xii	304.
Maleri fossils	xviii	272.
" group (Lower Gondwana)	xviii	267, 268.
Malot table-land	xiv	175.
Malgheen salt quarries described	xi	307.
Malprabha, 'cañon' of the	xii	99.
Manbhūm and Singhbhūm, geology of	xviii	61.
" faults and pseudomorphous quartz	xviii	76, 101.
" formations in	xviii	72.
" minerals in	xviii	102.
" physiography of	xviii	67.
" previous writers on	xviii	62.
Manchar group	xvii	57.
" fossils of the	xvii	64.
Mandi and Drang salt	xiv	19.
" salt rocks of and origin of salt	iii (4)	60, 61.
" salt, various opinions respecting age of	xi	136.
Manesultanupalem to Perikipadu, section from	viii	297, 312.
Manganese in dolomite	xii	56, 259.
" near Chaibasa	xviii	147.
" " Soorajpur	vi	341.
" of Wardha valley	xiii	114.

SUBJECT.	Volume.	Page.
Manganese ore, Wardha valley	xiii	76.
Manipur and the Naga Hills, geology of	xix	217.
" damage done at, by earthquake of 1869	xix	20.
" copper in	xix	241.
" edible earth in	xix	241.
" fossil resin	xix	226.
" iron of	xix	239.
" no moraines in Mizir valley	xix	229.
" origin of valley of	xix	236.
" salt in	xix	242.
" serpentine in	xix	224.
" " near Kungal thanna	xix	219.
" volcanic ash beds in	xix	219, 222.
Marayattoor, plant beds of	iv	46.
Marble rocks, Jubbulpore	ii	135.
Martaban group	x	328.
Marwat and Khasor hills	xvii	267.
<i>Mastodon angustidens</i>	xx	206.
" jaw from, near Broach	vi	181.
Masulipatam, geology of coast from 15° N. Lat. to	xvi	1.
Masuri ridge	iii (2)	66.
Matapenai or Kurali hill, trap of	vi	333.
Mauzulli to Bāndā, geology of	xi	205.
Mawbelurkar, section at, of difficult interpretation	iv	422.
Mayo mines, Salt range	xiv	158.
<i>Megalodon triqueter</i> , a Parā limestone fossil	v	62.
Melur group	xx	14.
'Menhirs' of sandstone	xx	101.
Metamorphic series in Manbhum	xviii	88.
" " " Nagpur	ix	301.
" " " Rajmahal hills	xiii	173.
" " " Singhbhum	xviii	130.
" " " the Aurunga coal-field	xv	31.
Meteoric falls, in the reign of Aurangzeb	xix	169.
Mhuror river, bilophodont mastodon from	ix	79.
Mhur, complicated geology of	ix	260.
Micaceous schists, S. Mahratta	xii	47.
Midnapore, geology of	i	258.
Miloh pass, <i>ammonites</i> reported in the	xx	107.
Minet-toung (Black hill)	x	231.
Mineral statistics,—Coal, 1869	vii	131.
Miocene series in Afghanistan	xviii	18.
Mizir valley, sub-recent deposits of	xix	229.
'Mo-jis' thunder-bolt	x	359.
Mom Conda, picturesque peak of	viii	248.
Moonimuddagoo, diamonds found at	viii	103.
Moogetalah and Kunlamuddi, section through	viii	297, 306.
" to Oostapully hill, section from	viii	297, 298.
Motepolliam, formations near	iv	170.
Motur horizon	x	161.
Moulmein group	x	325.
Mountain formation, theories on	iii (2)	Appendix.
Mud volcano a misnomer	x	307.
<i>Murchisonite</i> gneiss	xvi	206.
Murdan Khél, inverted section near	xi	186.

SUBJECT.	Volume.	Page.
Muree beds identified with Dugshai rocks	xi	166.
" Trans-Indus	xvii	243.
Muria hill, remarkable features of	vii	75.
Muskat, Dr. Castor's section of rocks at	vi	10.
Muth, section at	v	17, 22.
" series, fauna of	v	22.
Myit-ma-kha river	x	211.
Naga hills, axial of the	xix	224.
" coal-fields of	xii	269.
" coal measures in	xii	289.
" cretaceous rocks of	xii	285.
" crystalline rocks in	xii	282.
" former climate of the	xix	231.
" fossils from the	xix	227.
" gold in	xii	287.
" iron of	xii	359.
" petroleum of	xii	356.
" previous writers on the geology of	xii	271, 281.
" physical features of part of the	xix	229.
" probable recent depression of the	"	232.
" supposed 'moraines' of the	xix	228.
" upper tertiaries of the	"	227.
Negamalai group	xx	13.
Naggery quartzites (Kadapahs)	viii	41, 126, 168, 243.
Nagode, fossils from, doubtful	ii	53.
Nagpur and its neighbourhood, geology of	ix	295.
" physiography of neighbourhood of	ix	300.
" previous writers on geology of	ix	296.
Nahun and Subathu groups, relations of	iii (2)	92.
" beds unfossiliferous	iii (2)	15.
" group, defined	iii (2)	13.
" " of the Salt Range	xiv	109.
" Sivalik fossils north of	iii (2)	15.
Naini Tal and Almora	iii (2)	69.
Nargund, Political Agent at, murdered in 1858	xii	103.
Nari and Gáj groups, passage between	xvii	51.
Nari group	xvii	49.
" section of, at Bibi Nani	xx	174.
" only met with near Bibi Nani, Quetta region	xx	158.
" fossils of	xvii	52, 125.
Naul Tirth, legend of	xii	99.
<i>Nautilus bouchardianus</i> from Sind	xvii	35.
Nellore gneiss and Transition rocks	xvi	109.
North-east monsoon in Trichinopoly	iv	231.
Nowgong, damage done at, by earthquake of 1869	xix	29.
Nazira coal-field	xii	328.
Negra's rocks	x	298.
Nellore, physical geography of	xvi	115.
" portion of the Carnatic, geology of	xvi	109.
" previous writers on	xvi	114.
Nemalipuram and Coutranepully, section through	viii	297, 305.
Nerjee limestones (Kurnools)	viii	40, 70.
Neuroptorous insect from the Gondwana series	xiii	18.
Newbold, Captan, sketch of his work	viii	9.

S U B J E C T.	Volume.	Page.
Nga-tha-mu beds	x	277.
Ngordai valley, sub-recent deposits of	xix	236.
Nilghiri hills, fault systems of	i	230.
" characerer of surface due to marine action	i	214.
" economic geology of	i	244.
" geological structure of	i	211.
" geology of, by various writers	i	215.
" gneissose rocks of the	i	218.
" minerals of	i	219.
" rainfall of, and results	i	238.
" limestone in the	i	246.
Ningthi, alluvium of the	xix	238.
" gold of the	xix	241.
Nizam's Dominions, Barakars in	xiii	54.
" " 'Kamthis' in	xiii	78.
" Territory, coal in the	xviii	193.
North Arcot district, geology of	x	I.
Nullamullay beds (Cuddapahs)	viii	41, 126, 212.
" " " "	xvi	144.
Nullamullays, mines in the	viii	272 to 276.
<i>Nummulites garansensis</i> , and <i>sublævigata</i> , 'Nari' species	xvii	49.
Nummulitic group, Pegu	x	278.
" " of the Salt range	xiv	105.
" " section of basal beds at Maldipur	vi	357.
" limestone, capricious development of	xx	156.
" " of Cherra, fossils of	i	134.
" series in Kohat	xi	158.
" probable presence of beds of that age in Manipur	xix	223.
" series, Khasia region	vii	160.
Nummulitics, sections of, Pegu	x	286, 290.
Nundial shales (Kurnools)	viii	39, 42.
Nundycotecoor, Lydian stone of	viii	48.
Nungshang-khong, beds in the	xix	220.
Nunia valley, coal seams and mines in	iii	103.
Nurbudda district, geology of	ii	97.
" " early observers of geology of	ii	101.
" " faults and disturbances in the	ii	228.
" " to the Khandeish boundary	vi	344.
" " valley, alluvial deposits of	ii	279.
" " coal outcrops of, in	ii	268.
" " faulted boundary of Talchirs in	ii	237.
" " faults in, age of	ii	251.
" " fossil gastropoda	ii	284.
" " fossil vertebrata from	ii	289.
" " granitic rocks of, and age	ii	120, 125.
" " iron of	ii	112.
" " metamorphic rocks of	ii	130.
" " Oldham on iron ores of	ii	271.
" " palæontological papers on	ii	113.
" " physical geography of	ii	116.
" " trap rocks in	ii	217.
" " Vindhyan boundary in, faulted	ii	241.
Nurpur plateau, Salt Range	xiv	184.
Nurree salt quarries described	xi	310.
<i>Obolus</i> and <i>Siphonotreta</i> beds	xiv	87.

SUBJECT.	Volume.	Page.
<i>Obolus</i> in the Salt Range	xvii	216, 238.
Old coast lines in Orissa	i	276.
Olive group of the Salt Range	xiv	104.
" shales, coal in, W. Sind	xvii	135.
" " with <i>Cardita beaumonti</i> and amphiœlian vertebræ	xvii	133.
Oojein, fabulous account of the destruction of	vi	169.
Oolitic fauna in Spiti	v	86.
Oopalpád plateau	viii	59.
Ootatoor beds and gneiss, junction of	iv	42.
" " faulted against gneiss in spots	iv	60.
" coral-reef limestone, fossils of	iv	55.
" group described	iv	52, 73.
" " detailed geology of	iv	79.
" " fauna of	iv	75.
" " (plant beds)	iv	23.
" " summary of conclusions respecting	iv	97.
" plant beds, first noticed by Mr. C. Oldham	iv	39.
<i>Orbitolites mantelli</i> numerous in sandstone below Thaitmio	x	275.
Orissa, economic geology of	i	276.
" geological structure and physical features of	i	249.
" laterite of	i	280.
" Nilgiri hills in, described	i	260.
" proper, or Cuttack, Stirling's account of, quoted	i	1.
" rise of land in	i	276.
" rocks found in	i	253.
Ossiferous alluvium in Wardha valley	xiii	92.
" deposits, W. India	xii	232, 235.
" gravels and older alluvial deposits, S. Mahratta	vi	227.
Ouseley, Colonel, discovery of coal by	ii	109.
Overlap, no proof of unconformity	v	234.
Owk shales (Kurnools)	viii	40, 67.
<i>Oxyglossus pusillus</i> , Owen, note on	vi	387.
Pachinari group	x	155.
" range	x	138.
Paipully, section through	viii	23.
Pakal tank, chiefest of tanks in Telingana	xviii	175.
<i>Palæozamia</i> in Cutch	ix	114.
Palamow, economic resources of	xv	108, 111.
" ethnography of	viii	327.
" ethnology of	xv	24.
" fauna and flora of	xv	26.
Palghat gap, influence of	iv	232.
<i>Palissyia conferta</i>	xviii	277, 279, 289.
Palnad beds	viii	107.
" inversion of limestones	viii	258.
" ornamental marbles of	viii	282.
Panchet beds, Labyrinthodont and Dicyodont reptiles in	iii	198.
" " fauna and flora of	vii	332.
" " flora of	iii	204.
" group, bone bed in, near Deoli	iii	129.
" " described	iii	29, 126.
" " in the Aurunga coal-field	xv	45 86.
" " relation of, to other groups	iii	132.
" " Sirguja	xv	146.
Paneum group (Kurnools)	viii	40, 52, 56, 60.

SUBJECT.	Volume.	Page.
Pangadi and Katéru traps	xvi	205.
" 'wall' of quartzites	viii	65.
Para limestone	v	62, 124.
Parang glacier and pass	v	123.
<i>Parasuchus</i>	xiii	86.
Parkur Nuggur, Syenite, 'elvans' and trap in	ix	98.
Patchanullays described	iv	238.
Patkai, range in Angami, Naga hills	xix	227.
Patna, earthquake of 1869 slightly felt at	xix	33.
Paupugnee beds (Cuddapahs)	viii	41, 126, 148.
" siliceous oolitic beds in	viii	161.
" group of Cuddapahs	xvi	144.
Peat at Tolum	iv	253.
Peddawarum bluff; Rajmahals, <i>vide</i> Foote, Cuddalore, <i>vide</i> C. A. Oldham	xvi	178.
Pegmatite, ornamental, near Poplia	ii	123.
Pegu, alluvium in	x	227.
" area and population of	x	205.
" climatology of	x	207.
" economic geology of	x	340.
" fossil wood group in	x	247.
" " wood of	x	251.
" general stratigraphy of	x	221.
" geological groups in	x	227.
" " map of, by Dr. J. MacClelland	x	199.
" group	x	268.
" " fauna of	x	274.
" laterite in	x	244.
" older alluvium in	x	232.
" orographical features of	x	217.
" previous writers in	x	190.
" 'Regur' localities of, in	x	231.
" Yomá (range)	x	217.
Peninsular area of India, special geological history of	xvii	2.
Penn-air river, course of, described	viii	31.
Penner valley	xvi	121.
Pentacrinites in limestone at Naicolun	iv	55.
Perched blocks of diluvial origin in Palamow	xv	52.
Perim island, fossils of, discovered by D. Lush	vi	180.
" Gulf of Cambay, note on	vi	373.
<i>Perisphinctes asterianus</i> (Neocomian) in the Chichali pass	xvii	214.
Perkitti Rajah, legend respecting	xii	63.
Petroleum in the Makoom river (Assam)	iv	414.
" " Pegu	x	346.
" " the Salt range	xiv	297.
" springs	xiv	48.
" " at Namchik (Assam)	iv	403.
" " "	xvii	270.
<i>Peuce schmidiana</i> , a 'Cuddalore' exogen	iv	174.
" " a fossil conifer	xx	36.
Peyamalai, the rainless mountain	xx	4.
Phonda and Amboli ghats, section of traps at	xii	177.
<i>Phylloceras</i> from the Salt Range	xiv	95, 221.
<i>Phylloceras oldhami</i> , Waagen, described	ix	353.
<i>Physa prinsepia</i>	ii	202, 203.

SUBJECT.	Volume.	Page.
<i>Physa prinsepilii</i> described as <i>Conus</i> and <i>Voluta</i>	vi	177.
Pinnacled quartzites (Kurnools)	viii	40, 53, 61.
Pipe-clay in Manipur	xix	218.
Pisdura, fossils from	xiii	88.
Pishin area	xviii	6.
Pisolitic limestone described	iv	67.
Pistacite (epidote) in gneiss	iv	304.
Pitakári, section of Damudas at	iii	69.
Plant beds	iv	43.
" " note on age of, by Mr. T. Oldham	iv	49.
" " impressions, carbon of, replaced by iron peroxide	ix	312.
Plateau quartzites (Kurnools)	viii	40, 54.
Platinum from Bhamo	x	190, 192.
Pliocene deposits in Afghanistan	xviii	15.
Pluvial formations	xii	249.
Pondicherry area, anomalies in fauna of	iv	24.
" " red hills of	iv	173.
Poolavaindla or Naggery quartzites	viii	168.
Poolumpett slates with limestones (Cuddapahs)	viii	41, 126, 203.
Poorna valley, geology of	vi	276.
Porcellaneous rocks near Kachao, Manipur	xix	219.
Porphyritic trachyte of Kurreer island	ix	107.
Poshing, Upper Tertiaries at	xix	227.
Post-pliocene and recent beds, Quetta region	xx	168.
" " deposits in Afghanistan	xviii	12.
Post-Sevalik deposits	iii (2)	152.
Post-Tertiary and recent beds in the Salt Range	xiv	113.
" " group, Trans-Indus	xvii	245.
Pot-holes	xv	34, 187.
'Pot-holes' near Vellum	iv	259.
Pot-stone at Yermaputty	iv	371.
" " quarries at Carrupoor	iv	36.
Poungloun range	x	223.
Powagurh hill, an isolated trap island perhaps	vi	343.
Pranhita-Godaveri, earlier writers on area	xviii	173.
" " economic geology of area of	xviii	17.
" " formations in area of	xviii	164.
" " valley, geology of	xviii	151.
Pratt, Archdeacon, on the earthquake of 1869	xix	43.
<i>Productus</i> limestone from the Vadur pass, really cretaceous	xx	126.
Prome beds	x	270.
<i>Pseudo-diadema</i> from Eastern Prome	x	275.
Pseudomorphic salt-crystal zone in the Salt Range	xiv	98.
Pseudomorphous breccia	ii	245.
Puga valley, borax and minerals in the	v	131.
Pulicat and Chilka lakes, observations on	iv	190.
" " lake, origin of the	xvi	122.
Pulkoa schists	ii	29.
Pullassi, section at	ii	139.
Pung, meaning of term	iv	414.
Pungadi intertrappean fossils	xvi	239.
Punna sandstone of Carter	vii	11.
" " shales	vii	27, 64.
Puppa-doung, volcano of	x	250.
Purdon, W., fossils collected by, Salt Range	xiv	21.

SUBJECT.	Volume.	Page.
Purple sandstone group, Trans-Indus	xvii	239.
" " of the Salt Range	xiv	84.
" " Trans-Indus	xvii	239.
Putchum to Chorar, geology from	ix	99.
Pyanoor area, Madras	x	92.
Quarrying, method of and tool used in, Trichinopoly	iv	202.
Quartz crystals, bipyramidal	xvii	233.
" " in gypsum at Mâri on Indus	xiv	268.
" reefs and veins, S. Mahratta	xii	67, 128.
" rock, conglomeratic	xvi	140.
" " saccharine	xvi	138.
" " with pistacite	xvi	138, 141.
" schists, ferriferous	xvi	142.
" veins in the Nilghiris, minerals in	i	234.
Quartzite, a result of 'hydrometamorphism'	vii	181.
" cut by trap	vii	202.
" monolith, remarkable specimen of, S. Mahratta	xii	261.
" jaspery and pistacitic	xvi	141, 142.
Quasi-conglomeratic beds in gneiss	iv	300.
Quasi-prehistoric bone ornament from Valimukkam	xx	82.
Quetta and Bugti hills, physiography of	xx	131.
" " Dera Ghazi Khan, geological notes between	xx	105.
" " the Bolan pass, previous writers on	xx	109.
" eocene beds near	xx	148.
" geology of neighbourhood	xx	179.
" list of geological sub-divisions round	xx	138.
" to Sibi, geology of road from	xx	184.
Quicksands at Shakkurdurra	xi	290.
Rachotee, section past	viii	25.
Râgavapuram, shales and fossils of	xvi	218, 219.
Raichoor Doab	viii	78.
Rainfall at Sispara and Darjeeling	i	238.
Raised oyster beds	xvii	184.
Rajamundry intertrappean beds and traps	xvi	231.
" sandstones	xvi	205.
Rajmahal beds, flora of	ii	318.
" group	xiii	209.
" hills, economic resources of the	xiii	226.
" " geology of	xiii	155.
" " list of coal seams in the	xiii	230.
" " pottery clays in the	xiii	240.
" " previous writers on	xiii	160.
" " table of formations in the	xiii	171.
" plant beds in Nellore	xvi	171.
" series, name applied	ii	313.
Rajpeepla hills, geology of	vi	351.
Rameswaram island, traditional origin of	xx	73.
Ramgurh coal-field, crystalline rocks in	vi	130.
" " " Damuda series in	vi	116.
" " " economic summary of	vi	129.
" " " faults in	vi	127.
" " " iron stone shale, group in	vi	124.
" " " Raniganj, group in	vi	125.
" " " report on	vi	109.
" " " Talchir series in	vi	112.

SUBJECT.	Volume.	Page.
Ramkola and Tatapani coal-fields	xv	129.
Rammel, Mr., shaft sunk for coal at Lameta Ghât, by	ii	111.
Raniganj and neighbourhood	iii	89.
" beds in Sirguja	xv	145.
" coal, quality of analysis of	iii	188.
" coal-field, geological structure and relations of	iii	1.
" " position and extent of	iii	24.
" " recapitulation of rocks of	iii	31.
" " history of	iii	2.
" coal mines, history of	iii	154.
" " worked near, in 1777	iii	1.
" collieries, history of	iii	154.
" " list of and statistics	iii	179.
" " methods of working	iii	161.
" " statistical list of	iii	179.
" comparative section of coal seams near	iii	100.
" 'fault' near	iii	95.
" field, economic summary of	iii	186.
" " faults traversing	iii	149.
" " laterite in and alluvium of	iii	139.
" " trap dykes and intrusions	iii	141.
" group in the Aurunga field	xv	45, 82.
" mines, method of working	iii	161.
" neighbourhood and mines of	iii	89.
Ranikot beds, fossils of	xvii	143, 147.
" group	xvii	37.
" " fossils of	xvii	39, 143, 144, 147.
Rapfo ridge, limestone of	xix	221.
Ratnagiri plant-beds claim examination	xii	222.
Raveralah, section north of	viii	297, 308.
Rawundeo hill, section near	ii	152.
Recent deposits in Nellore	xvi	180.
Red clay zone in Kohat	x	155.
Red jasper in Bijawurs	vi	317.
Red marl and gypsum, Trans-Indus	xvii	238.
" " rock salt of Salt Range	xiv	70.
Red soil, analysis of, by Mr. Tween	iv	197.
Regur, analysis and origin of, discussed	iv	355.
" in Pegu	x	229.
" of Trichinopoly and South Arcot	iv	183.
Reports, as of cannon, heard during earthquake of 1869	xix	28.
Resin, fossil used as incense	ix	89.
" " in Manipur	xix	226.
Rewahs and Bundairs faulted contact of	vii	73.
Rewah group	{ ii	55.
" sandstone and shales	vii	62.
" shales	vii	27.
" table land	ii	59.
" Rhætic series and fauna	vii	15.
Rhætic series and fauna	v	62, 63.
Rhinoceros deccanensis	xii	232.
" sivalensis, a Gâj fossil	xvii	57.
" Rice grain" grits	xii	147.
Rivers, excavating or depositing, test of	x	215, 216.

SUBJECT.	Volume.	Page.
River gorges, in transverse fractures, N. W. Himalaya . . .	iii (2)	122.
Road materials in Pegu	x	351.
" " " South India	iv	204.
Rock salt of Kohat	xi	128, 136.
" " Persia, age of	xi	135.
" " theories of formation of	xi	141.
" " systems in Central India and Bengal, age of	iii	197.
Rubies "as large as pigeons' eggs" <i>fide</i> M. Bredamajie	x	204.
Runn island range, <i>Nerinea</i> beds in	ix	99.
" of Kutch	ix	14.
Runneekote, geology of the neighbourhood of	vi	1.
Rupshu, geology of	v	122.
" " river deposits in	v	129.
" " serpentine in	v	128.
Rutile in amethyst	iv	371.
Salem magnetic iron ore in	iv	36.
" " Trichinopoly, Tanjore, and S. Arcot; geological structure of	iv	223.
Salt at Durree	xi	282.
" " Kurar	xi	281.
" " Kurruk	xi	268.
" " Nurree	xi	272.
" " Rindghur	xi	257.
" " Sirraikhwā	xi	273.
" " Tuppee drung	xi	268.
" " cost of, Trans-Indus	xi	314.
" " in Manipur	xix	242.
" " Oomrawuttee	vi	380.
" " 'licks' in Sikkim	xi	91.
" " marl and gypsum, Trans-Indus	xvii	238.
" " method of quarrying	xi	302.
" " mines and mining	xiv	284.
" " Range, climatology	xiv	61.
" " coal localities in the	xiv	295.
" " culminant point of, at Son-Sakesar	xiv	42, 243.
" " eastern plateau	xiv	143.
" " faults in the	xiv	53.
" " fossils, wide range of some	xiv	26.
" " geology of the	xiv	1.
" " lakes of the	xiv	46.
" " orography and physical geology of the	xiv	50.
" " physiography of	xiv	36.
" " previous writer, on geology of	xiv	3.
" " revenue from salt	xiv	1.
" " summary of geology of the	xiv	277.
" " Trans-Indus, extension of	xvii	211.
" " Revenue Trans-Indus	xi	315.
" " Trans-Indus and Cis-Indus contrasted	xi	115.
Samaguting, "Dun" deposits near	xix	228.
Sanag lake	xii	119.
Sandstone flags, due to diagonal bedding	xii	143.
" " monoliths	vii	120.
Sardi salt mines	xiv	180.
Satpura coal-basin, a true basin of deposition	x	135.
" " Barākar group in	x	162.

SUBJECT.	Volume.	Page.
Satpura coal-basin, Damuda series in	x	159.
" " described	x	133.
" " the Talcheer group in	x	163.
Sattavedu hills and area, Madras	x	66.
Saya, geology of	xi	237.
Schlagintweit, Messrs. R. and A., erroneous conclusions of	ii	108.
" " " statements of the	vi	161.
" Dr. A. Von, fossils recorded by	viii	11.
Schistose areas west of the Kistna	xvi	11.
" section between Bolan pass and Girishk	xviii	1.
Schorl rock	iv	338.
Sedimentary beds at base of Trap series	vi	327, 328
Seismic map of India	xix	163.
Semri group, its divisions	ii	6.
" " identical with Sub-Kymore	vii	27.
Serpentine, apple-green	iv	323.
" granular in limestone	vi	321.
" in Manipur	xix	219.
" Orissa	i	261, 278.
" Pegu	x	331.
Shah-drung, remarkable section at	xi	188.
Shekh Budin, fossils from near	xvii	294.
" Gund	xvii	282.
Shevaroy and other groups of hills	iv	18, 235.
Shillong plateau, cretaceous beds in the	vii	153.
" " geological sketch of	vii	151.
" " gneiss	vii	196.
" series	vii	197.
<i>Shorea robusta</i> , charcoal of above used in Cuttack	i	14.
Shué-Gween, gold and gold-dust from	i	94.
Shuwuki, inversion of beds near	xi	196.
Sibi to Jacobabad, geology of road from	xx	199.
Sikandarmalai group	xx	12.
Sikkim, early writers on geology of	xi	2.
Silchar, damage done at, by earthquake of 1869	xix	4.
Silewada, section at	ix	310.
Silhet trap	vii	183.
Silicified wood in Manohar beds, exogenous and endogenous	xvii	142.
Silurian beds in the Salt range	xiv	86.
Simla, geology of, and slate	iii (2)	33, 34.
Sind and Punjab frontier, between Quetta and Dera Ghazi Khan	xx	105.
" earlier writers on	xvii	5.
" economic geology of	xvii	192.
" foraminifera	xvii	9.
" general conclusions on geology of	vi	12.
" geological formations of	xvii	32.
" hills and ranges of	xvii	27.
" rivers of	xvii	28.
" sequence of formations in	xx	107.
" tertiary and infra-tertiary groups of, fossils of	xvii	197.
" Western, geology of	xvii	1.
Singareni coal-field	xviii	186.
" conglomerates and quartzites (Cuddapahs)	xviii	213.

SUBJECT.	Volume.	Page.
Singaran country, east of	iii	78.
Singhbhum, economic resources of	xviii	140.
" previous writers on	xviii	114.
Singiputty group of magnetite beds	iv	280, 288.
Sirban mount, cretaceous beds of	ix	341.
" " geology of	ix	331.
" " infra-triassic beds of	ix	335.
" " jurassic beds of	ix	340.
" " <i>Megalodon</i> and <i>Dicerocardium</i> beds of	ix	337.
" " section contrasted with section of Spiti rocks	ix	349.
Sirboo shales	vii	27, 84.
Sita riva, section of Damuda rocks on	ii	169.
Sitsyahu shales	x	269.
Sivalik beds and alluvium, relations of	iii (2).	14, 19.
" and eocene, conformity of	xx	164, 205, 207.
" fossil from Lehri and Jalalpur	xiv	18.
" group, character of and thickness of	iii (2)	14, 17.
" " defined	iii (2)	14.
" " of the Salt range	xiv	110.
" " Trans-Indus	xvii	243.
" " unconformable overlap on Nahun beds	iii (2)	14.
" (Manchar) of the Suleman hills	xx	160.
" mollusca from near Dera	xx	162.
Slag, analysis of, from Birbhum	i	18.
Slate in Sikkim	xi	90.
Smelting furnaces of Sāwant Wāri	xii	267.
Soils and superficial deposits of Trichinopoly, South Arcot and Tanjore	iv	180.
" and sub-aerial deposits west of the Kistna	xvi	97.
" in Madura and Tinnevely	xx	83.
" note on, Chapter xii, by Mr. T. Oldham	iv	220.
" S. Mahratta	xii	250.
Son plateau, Salt Range	xiv	201.
Sonbudra R, hills in catchment basin of	x	138.
Sorapur and Kiadigiri traps	xii	59.
South Arcot, lime-kilns used in	iv	207.
" " and Trichinopoly districts, cretaceous rocks of	iv	1.
Southern India, crystalline rocks of	iv	29.
" " granitic rocks of	iv	30.
" " physical conditions of, in cretaceous times	iv	28.
South Ladak, geology of	v	337.
South Mahratta country, climatology of	xii	14.
" " " earlier writers on	xii	19.
" " " geology of	xii	1.
" " " gneiss of	xii	37.
" " " hydrology and orography of	xii	13, 4.
" " " table of formations in	xii	17.
Speckled sandstone of the Salt Range	xiv	90.
<i>Sphyrænodus</i> , allied form, Wardha valley	xiii	90.
Spilsbury, Dr., exaggerated account of coal discovered by	ii	110.
<i>Spirifer moosakhailensis</i> , a 'Kuling' fossil	v	26.
Spiti and Simla sections compared	v	141.
" early writers on the geology of	v	2, 65.

SUBJECT.	Volume.	Page.
Spiti carboniferous rocks in	v	24.
" general remarks on the ages of rocks in	v	132.
" geology of	v	1 to 152.
" gypsum and minerals in	v	155.
" " of, origin of	v	159.
" Jurassic beds in	v	83.
" " upper, in	v	113.
" Karewah deposits of	v	119.
" Liassic beds in	v	66.
" list of minerals from	v	162.
" Muth and Bhabeh series conformable in	v	23.
" oolitic beds in	v	85.
" palæozoic formations of	v	16.
" Rhætic beds in (<i>Megalodon triqueter</i>)	v	62.
" shales, oolitic	v	85.
" Silurian rocks in	v	17.
" Triassic rocks "	v	30.
Sreeshalum quartzites (Cuddapahs)	viii	41, 126.
Sripermatoor area	x	100.
" area, outliers of	x	113.
Staurolite and kyanite in gneiss	xvi	8, 15.
Steatite and amphibolite, with acicular actinolite	iv	321.
" " fibrous quartz associated	x	337.
" " tremolite in schists	ii	137.
" French chalk or 'Bulpum'	viii	166.
" from Pegu, analysis of	x	339.
" in Manipur	xix	219.
" " Sikkim	xi	90.
" magnesite and pistacite	iv	325.
" of Tandagoundenpolliam	i	324.
Steatitic mineral in fissures of gneiss in Orissa	i	262.
Steps in main boundary ; not cross-faults	iii (2)	115.
Stibnite in Lahoul	v	165.
Stilbite veins	xv	36.
Stream action in cutting through hard ridges, explained	xx	133.
Strontium in Nummulitic limestone	xi	279.
Stone bangle	x	358.
" cart-wheels	xvi	105.
" implements	x	355.
" " in laterite	x	43, 58.
" " in Southern India	x	10, 41, 43.
Susukameng, rocks near	xix	220.
Syenite of Kalinjur hills	ix	48.
Sylhet, damage done at, by earthquake of 1869	xix	16.
Sylvine and Kieserite from the Mayo mines	xiv	32, 80.
Sub-aerial formations, S. Mahratta	xi	244.
Subathu 'coal,' a fault-rock, analysis of	iii (2) i	29.
" group, bottom bed of	iii (2)	78.
" " description of and area	iii (2)	74.
" " prevalent character of	iii (2)	11.
" " fauna and flora of	iii (2)	97.
" " south of Kashmir	iii (2)	89.
" " sections near	iii (2)	83.
Sub-Himalayan series	iii (2)	101.
" " characters of	iii (2)	17.

SUBJECT.	Volume.	Page.
Sub-Himalayan series, name proposed	iii (2)	10.
Sub-Kymore group	ii	5, 138.
" name proposed	ii	303.
Sub-metamorphic rocks in Sirguja	xv	138.
" " Singhbhum	xviii	124.
Sub-nummulitic tertiary and alluvial beds of Cutch	ix	66.
Sub-recent marine beds, fossils from	xx	57, 60, 61, 62, 68.
" " " in Tinnevely	xx	55.
Sukkur and Rohri hills	xvii	101.
Sulphur localities near the Punjab frontier	xx	231.
Sullawai group (Lower Vindhyan)	xviii	227, 229.
" " unconformable on Cuddapahs	xviii	224.
Sulphur, native, from Puga	v	162.
" " of the Gunjully hills, Kohat	xi	293.
Sulphurous springs, Kohat	xi	278.
Superficial deposits in Singhbhum	xviii	121.
Supra-Pachmari beds	x	140.
Surat and Broach, geology of	vi	356.
Suroo to the Indus, section of rocks from	v	347.
Tádapurtee slates and limestones	viii	181.
Takátu hill, wholly eocene	xx	122.
Tagling limestone, lower, fauna of	v	67, 124.
" " upper (middle lias) fauna of	v	80.
Talcheer (Talchir) coal-field	i	33.
Talchir and Damuda boundary, faulted	ii	237.
" and Nagpur fossils	i	76.
" basin defined	i	44.
" ' boulder bed ' described	i	47.
" " bed, origin of, considered	ix	321.
" " large one measured	vi	45.
" " bed in Ramghur coal-field	xv	79.
" boulders, 40 feet in diameter, in Sirguja	i	142.
" coal and iron of	i	1, 85.
" coal-field, geological structure and relations of	i	33.
" Damoodah and Mahadeva groups (section)	i	45.
Talchirs described	iii	28, 32.
" " and name proposed	ii	307, 310.
" flora of	ii	335.
" glaciated boulders in, first announcement of	ix	324.
" glacial origin of, proved	xiii	16.
" <i>glossopteris</i> and <i>cyclopteris</i> , in the	vii	296, 331.
" in Chopé coal-field	viii	351.
" in Daltonganj coal-field	viii	331.
" in Hutar coal-field	xv	91.
" in Itkhuri coal-field	viii	322.
" in the Jherria basin	v	233.
" (Khurhurbari field)	vii	217.
" in Nagpur	ix	301, 303.
" in Nurbudda valley	ii	146.
" in Palamow	xv	38, 55, 91.
" in the Pranhita-Godaveri area	xviii	238.
" in the Rajmahal hills	xiii	175.
" in the Sátputra basin	x	163.
" in Sirguja	xv	142.

SUBJECT.	Volume.	Page.
Talchirs in the Wardha valley	xiii	15, 94.
" mode of formation of	vi	116.
" section of, in Jherria basin	v	241.
" series in the Deogurh fields	vii	250, 253, 254.
Talcose schists, S. Mahratta	xii	54.
Taldanga, section at	iii	60.
Talikot limestones (upper Bhima age)	xii	149.
Tambraparni delta, advance of	xx	80.
Tangkul Hungdung, red slates near	xix	221.
Tanjore, megalithic slab at	iv	367.
" Cuddalore sandstones at	iv	167.
Tanks neglected	xviii	162.
Tapassi, 22 feet coal seam at	iii	82.
Tapir not certainly known from Ava beds	x	256.
Taptee and Nurbudda, early observers on geology of	vi	166.
" " Lower Nurbudda valleys, Geology of	vi	163.
Taptee river, Tertiary fossils from, and section	vi	369.
Tara sandstone of Carter	vii	11.
Tatapani coal-field	xv	126.
" sections in	xv	155 to 192.
Tawa river, section of coal measures on	ii	154.
'Tchornozem' similar to Regur	vi	236.
Teinandamullays described	iv	236.
Teri, the Tinnevelly name for a sand hill	xx	88.
Terraces in Tiki valley, Manipur	xix	234.
" " Thobaball Turel valley	xix	236.
Tertiaries in the Suleman range, thickness of	xx	218.
" and alluvial deposits, Nurbudda valley	ii	279.
Tertiary and Jurassic beds, section of, in Wagur	ix	123.
" bed, rolled nummulitic limestone in	xi	170.
" beds, lower, of Cutch	ix	74.
" beds, upper, of Cutch	ix	80.
" rocks, absent, east of the Jaldoka, Western Duars	xi	48.
" sandstones and clays in Kohat	xi	165.
" " of the Salt Range	xiv	108.
" " transitional, with limestone	xvii	234.
" sections of, in Cutch	ix	71.
" series in Sikkim	xi	45.
" upper, beds of Manipur	xix	225.
" " fossils found in, at Yemi	xix	227.
" of Naga hills	xix	227.
<i>Tetragonolepis</i>	xviii	276.
<i>Thalassina scorpionoides</i> , mangrove crab	x	228.
Thermal springs of India	xix	99, 156.
Tib section, its importance. (also; for ultimate fate see Records, Geol. Survey of India, vol. xiv, p. 173)	iii (2)	111.
Tib, unconformable junction of Nahun and Sewalik beds at	iii (2)	108.
Tilla mount, Salt Range	xiv	38.
" bridge	xiv	124.
Tiki valley, rocks of	xix	234.
" sub-recent deposits of	xix	233.
Tinnevelly, geology of	xx	1.
" metamorphic area of	xx	22.
Tipám group	xii	296.
" " probably of Triassic age	xix	224.

SUBJECT.	Volume.	Page.
Tirhowan limestone and breccia	ii	13.
" " outlier	ii	31.
Tiri Tauii, geology of western watershed of basin of	xi	186.
Tirtamullay group of magnetite beds	iv	280, 28
Tirumangalam group	xx	11.
" " section at	iv	172.
Ton-doung, or lime hill	x	295.
Tons river, Rewah sandstone on	ii	54.
Toorun Mul hill	vi	345.
Tors, granitic in Trichinopoly	iv	302.
Trachyte and trachy-dolorite, W. India	vi	221.
" " near Bassein (Pegu)	x	330.
Trachytic porphyry of the Rajmahal hills	xiii	220.
Tranquebar, destruction of beach at	iv	362.
Trans-Indus disturbance, age of	xvii	228.
" " economic geology	xvii	302.
" " extension of the Salt range	xvii	211.
" " geology, early writers on	xvii	212.
" " geology, table of formations	xvii	235.
" " geology of	xvii	232.
" " hills	xiv	272.
" " Salt range in the Kohat district	xi	105.
" " " table of formations of	xvii	235.
Trap and granite junction near Mandlaisur	vi	290.
" " intertrappeans in Nagpur	ix	301, 318.
" " area in Western India, extent of	vi	141.
" " as a building stone	vi	379.
" " columnar, near Goojree	vi	292.
" " dykes, absence of, in sedimentary rocks in Cuttack	i	37.
" " dykes and intrusions in Raniganj field	iii	141.
" " dyke containing fused granite fragments	vi	345.
" " dykes in Kurhurbari field	vii	239.
" " " Trichinopoly, rarity of	iv	304.
" " flows, dip of, in Rajpipla area	vi	353.
" " " with vertical tubes	ix	199.
" " in Nagpur	ix	315.
" " in red marl	xiv	75, 161.
" " intrusive, of Cutch	ix	64.
" " " in Nellore	xvi	154.
" " " in the Nilghiris	i	225.
" " in Wardha valley	xiii	91.
" " junction with Damuda sandstones, character of	ii	193.
" " minerals most commonly met with in	vi	141.
" " of Cossyah hills pre-cretaceous	iv	417.
" " Rajamundry identical with Deccan rock	vi	139.
" " Western and Central India	vi	137.
" " Western India, area of	vi	138.
" " rocks in Nellore	xvi	165.
" " " Sirguja	xv	151.
" " lithology of Narbudda	ii	219.
" " of the Rajmahal hills	xiii	215.
" " of Trichinopoly	iv	328.
" " porphyritic basalt in	vi	142.
" " red bole in, probable origin of	vi	143.
Trap rocks, volcanic ash beds	vi	142.

[illegible]

SUBJECT.	Volume.	Page.
Valudayur and Arrialur groups in Pondicherry	iv	151.
Vandyked limestone	xii	126.
Vein quartz with columnar structure	xii	287.
Veligonda range	xvi	116.
Vellum, amethysts and cairngorms from	iv	167.
„ stones	iv	258, 370.
Vemávarum beds, list of fossils from	xvi	66.
„ shales, conflicting views of age of	xvi	84.
<i>Venus</i> from Naga Hills	xix	228.
Verdachellum and Pondicherry areas	iv	144.
„ beds separated by Professor Forbes	iv	9.
Vicary, Captain, on geology of Sind	xvii	5.
Vindhyan area, faults in, less extensive than once thought	vii	75.
„ bottom beds, capricious in development	vii	31.
„ conglomerates	vii	31, 55.
„ escarpments	vii	14, 18.
„ fault, Great Northern, traced 130 miles	vii	75.
„ formation	ii	52.
„ fossils so called in	vii	102.
„ (Franklin's) fossils	ii	53.
„ group, name proposed	ii	305.
„ identical with 'Semri' group	vii	44.
„ in Bundelcund	ii	1.
„ „ the Wardha valley	xiii	11, 94.
„ ledges, a feature of this formation	ii	61.
„ lower, sub-divisions of	vii	28—29.
„ lowest limestone, thickness and development of	vii	33.
„ middle limestone, remarkable character of	vii	39.
„ name proposed by Dr. Oldham	vii	11.
„ north-west extension	ii	60.
„ or Rotasgarh limestone, character and thickness of	vii	41—42.
„ outlying areas of	vii	123.
„ porcellanic and trappoid beds	vii	35.
„ remarks on, as a whole	vii	101.
„ series	ii	141.
„ „ in North-Western and Central Provinces	vii	1.
„ „ no fossils in	ii	145.
„ „ previous writers on the	vii	2.
„ stratigraphy and section	vii	61—62.
„ sub-divisions of	ii	56.
„ upper and lower, conformable	vii	46.
„ „ described	vii	48.
„ „ sub-divisions of	vii	27.
Vindhyan and Bijawars, relation between	vi	206.
„ „ Gwalior unconformable	vii	57.
„ age of	ii	65.
Vittrooe hill, in Wagur, section of	ix	125.
Volcanic beds of Manipur	xix	219.
Wagur, East Cutch, detailed geology of	ix	119.
Wangtu bridge on the Sutlej to Sungdo on the Indus, sections across the Himalayas, from	v	1.
Wardha valley and Nizam's dominions, borings in the	xiii	116.
„ coal-field	xiii	1.
„ „ previous writers on	xiii	1—3.
„ economic resources of	xiii	97.

SUBJECT.	Volume.	Page.
Wardha valley, fossils near Buttoda in	vi	285.
" geological formations in the	xiii	8.
" " literature of	xiii	140.
" relationship of rock groups in the	xiii	94.
Western and Central India, physiography of	vi	183.
" " Traps and Inter-trappean beds of	vi	107.
" Ghâts and Konkan, different types of denudation	xii	12.
Western India, alluvium of, fluvialite	vi	229.
" cretaceous series in	vi	207.
" list of formations in	vi	189.
" metamorphic series of	vi	190.
" salt in alluvium of Berar	vi	229.
" tertiary beds of	vi	223.
" Vindhyan series in	vi	205.
Western Sind, geology of	xvii	1.
Western Thibet, geology of	v	337.
White-ants' nests abundant in Tinnevely	xx	85.
White Elephant rock, dangers of climbing	iv	339.
Williams, D. H., report on Raniganj coal-field	iii	8.
" reports of, quoted from	i	78.
Wun district, Barakars and borings in	xiii	38.
Yanadis, a jungle race	xvi	112.
Yemi, fossils found at	xix	219.
Zamia beds in Cutch associated with marine fossils	vi	18.
" " intercalated with marine beds	vi	27.
Zanskar, geology of	v	337.
Zinc-blende in Lahoul	v	166.
Zircon in Khasi hills	i	111.
" in Cuttack	i	37.
Zoull v alley	xix	229.
Zumha valley, sub-recent deposits of the	xix	230.

SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01311 6009

SILPA